

**FINAL  
ENVIRONMENTAL ASSESSMENT**

**JOINT TASK FORCE SIX  
PROPOSED LIGHTING PROJECT  
YUMA COUNTY, ARIZONA  
IMPERIAL COUNTY, CALIFORNIA**

**Prepared for:  
Joint Task Force Six  
Fort Bliss, Texas**



**Prepared by:  
U.S. Army Corps of Engineers  
Fort Worth District**

**May 1999**

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## EXECUTIVE SUMMARY

As a result of the high rate of violent crime, the continual damage to our Nation's health and economy, and strains on vital relationships with international allies; the United States (U.S.) Congress developed the National Drug Control Strategy (NDCS) and incorporated the Department of Defense (DoD) into this new plan. The Secretary of Defense established Joint Task Force Six (JTF-6) to coordinate all DoD counter-drug support to Federal, State, and local law enforcement agencies' (LEAs) in an effort to curtail drug smuggling activities into the U.S. and protect national security. JTF-6 was assigned to assist LEAs who have drug interdiction responsibilities in the continental U.S. by providing general operational and engineering support. In addition, the assistance would provide all or part of the mission-essential training elements for the military unit involved.

A Programmatic Environmental Impact Statement (PEIS), prepared in 1994 for the Immigration and Naturalization Service (INS) and JTF-6, proposed projects that facilitate LEA missions to reduce illegal drug trafficking. The PEIS addresses the cumulative effects of past and reasonably foreseeable actions undertaken by JTF-6 for numerous LEAs in the four southwestern states (Texas, New Mexico, Arizona, and California). This Environmental Assessment (EA) tiers from the 1994 PEIS (U.S. Army 1994). Cooperating agencies involved with the Proposed Action include the U.S. Border Patrol (USBP), INS, and JTF-6.

The purpose of the Proposed Action is to minimize the influx of illegal contraband (i.e., drugs) from entering the U.S., and to reduce drug-related crime along the border area through the use of deterrent measures and by maximizing the effectiveness of the USBP. This EA addresses the potential impacts associated with a proposed lighting project along the U.S.-Mexico border in Yuma County, Arizona and Imperial County, California. The Proposed Action involves the installation of lighting poles placed at either the 60-foot ROW or at a line 150 feet north of the international border in southern and western Yuma County, Arizona. Another segment of lights is proposed for areas adjacent to the Wellton-Mohawk Bypass Drain running north/south, west of Gadsden and Yuma, Arizona. A final segment of lights is proposed for the public access POE parking lot of the Andrade Reservation in Imperial County, California. Approximately 154 total

poles would be installed in these areas. A secondary usage of these poles may be for camera equipment at a later date.

In addition to the Proposed Action, there were three other alternatives considered as part of this environmental impact analysis: 1) No-Action Alternative; 2) Reduced Lighting Alternative; and 3) Use of Portable Lighting Systems. The Use of Portable Lighting Systems and the No-Action Alternative were carried throughout the analysis, and are reflected in the baseline environmental conditions of the area. Under the No-Action Alternative, there would be no reduction in the illegal drug trafficking and criminal activity. The Reduced Lighting Intensity Alternative was eliminated due to the lack of light-sensitive threatened or endangered species or their preferred habitat occurring in the proposed project area. Additionally, this alternative would not be as effective in assisting the USBP in the accomplishment of their mission.

Potential impacts of this proposed project were classified at one of three levels: significant, insignificant (or negligible), and no impact. Significant impacts (as defined in CEQ guidelines 40 CFR 1500-1508) are effects that are most substantial, and therefore should receive the greatest attention in decision-making process. Insignificant impacts would be those impacts that result in changes to the existing environment that could not be easily detected. No-impact actions would not alter the existing environment.

There would be no significant areas of environmental concern associated with the Proposed Action. There could be some insignificant environmental issues associated with the proposed installation of the lighting poles (i.e., air geological resources, biological resources, cultural resources, and noise); however, these would be temporary in nature and easily mitigated through sound engineering practices. Under the Proposed Action, there would be a beneficial socioeconomic impact to the area in the form of a reduction in drug trafficking and related criminal activities. There would be no impact to land use, water resources, aesthetics, environmental justice, or solid/hazardous waste generation or management as part of the Proposed Action.

**FINDING OF NO SIGNIFICANT IMPACT  
JOINT TASK FORCE SIX  
PROPOSED LIGHTING PROJECT  
YUMA COUNTY, ARIZONA  
IMPERIAL COUNTY, CALIFORNIA**

The Proposed Action would involve the installation of lighting poles along the southern and western borders of Yuma County, Arizona and along the southern and western boundaries of the Andrade Reservation POE in Imperial County, California. The primary use of these poles is for lighting; however a secondary use may be for camera equipment at a later date. The purpose of the Proposed Action is to assist in fulfilling the U.S. Border Patrol's (USBPs) mission to reduce illegal drug trafficking along the U.S.- Mexico border by maximizing the effectiveness of the USBP. Approximately 70 U.S. Military personnel will be utilized for pole installation.

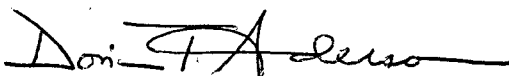
In addition to the Proposed Action, there were three other alternatives considered as part of this environmental assessment: 1) No-Action Alternative; 2) Reduced Lighting Intensity; and 3) Use of Portable Lighting Systems. The Use of Portable Lighting Systems and the No-Action Alternative were carried throughout the analysis, and were reflected in the baseline environmental conditions of the area. Under the No Action Alternative, there would be the continued socioeconomic concerns relating to the illegal drug trafficking and criminal activity. The Reduced Lighting Intensity alternative was eliminated from further consideration because it would not be as effective in assisting the USBP in the accomplishment of their mission, and offered the same if not greater, potential for environmental concerns as the Proposed Action.

A Programmatic Environmental Impact Statement (PEIS), prepared in 1994 for the Immigration and Naturalization Service (INS) and Joint Task Force Six (JTF-6), proposed activities which facilitate Law Enforcement Agencies' (LEAs) missions to reduce illegal drug activity along the southwestern border of the U.S. The PEIS addresses the cumulative effects of past and reasonably foreseeable projects undertaken by JTF-6 for numerous LEAs in the four southwestern states (Texas, New Mexico, Arizona, and California). This Environmental Assessment (EA) tiers from the 1994 PEIS (U.S. Army 1994). Cooperating agencies involved with the Proposed Action include the U.S. Border Patrol, INS, and JTF-6.

There would be no significant areas of environmental concern associated with the Proposed Action. There could be some insignificant environmental issues associated with the proposed installation of the lighting poles (i.e., air, geological resources, biological resources, cultural resources, and noise); however, these would be temporary in nature and easily mitigated through sound engineering practices.

Under the Proposed Action, there would be a beneficial socioeconomic impact to the area in the form of a reduction in drug trafficking and related criminal activities. There would be no impact to land use, water resources, aesthetics, environmental justice, or solid/hazardous waste generation or management as part of the Proposed Action.

Based on the results of the EA and the environmental design measures to be incorporated as part of the Proposed Action, it has been concluded that the Proposed Action will not have a significant adverse effect on the environment.



Dorian T. Anderson  
Brigadier General, U.S. Army  
Commander

14 April 99

Date

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- E Notice of Availability

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**LIST OF ACRONYMS AND ABBREVIATIONS**

AAI	Aztlan Archaeology, Inc.
ADA	Arizona Department of Agriculture
ADEQ	Arizona Department of Environmental Quality
ADWR	Arizona Department of Water Resources
AGM	Arizona Groundwater Management
AIRFA	American Indian Religion Freedom Act
AMA	Active Management Area
ANHP	Arizona Natural Heritage Program
AR	Army Regulation
ASM	Arizona State Museum
AZ	Arizona
BLM	Bureau of Land Management
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
dB	Decibel
dBA	A-weighted decibels
DoD	Department of Defense
EA	Environmental Assessment
e.g.	for example
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
F	Fahrenheit
FCAA	Federal Clean Air Act
FIFRA	Federal Insecticides, Fungicide and Rodenticide Act
FONSI	Finding of No Significant Impact
FY	Fiscal Year
GLO	General Land Office
GPS	Global Positioning System
HC	Exhaust Hydrocarbons
HCHO	Aldehydes
HMTA	Hazardous Materials Transportation Act
i.e.	for example
IBWC	International Boundary and Water Commission
INS	Immigration and Naturalization Service
IO	Isolated Occurrence
JTF-6	Joint Task Force Six
kW	Kilowatt

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**LIST OF ACRONYMS AND ABBREVIATIONS (cont.)**

LEA	Law Enforcement Agencies
Ldn	Day/Night Noise Level
MET	Meteorological
METL	Mission Essential Training Elements
Mph	Miles Per Hour
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NDCS	National Drug Control Strategy
NEPA	National Environmental Policy Act
NESL	Navajo Endangered Species List
NHPA	National Historic Preservation Act
NOA	Notice of Availability
NO <sub>x</sub>	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPL	Native Plant Law
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
OSHA	Occupational Safety and Health Administration
PEIS	Programmatic Environmental Impact Statement
PL	Public Law
PM <sub>10</sub>	Particulates
POE	Port of Entry
PSD	Prevention of Significant Deterioration
RCRA	Resource Conservation and Recovery Act
ROI	Region of Influence
ROW	Right of Way
SARA	Superfund Amendments and Reauthorization Act
SDWA	Safe Drinking Water Act
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO <sub>x</sub>	Sulfur Oxides
TAMU	Texas A & M University
TSCA	Toxic Substances Control Act
U.S.	United States of America
USACE	United States Army Corps of Engineers
USBP	United States Border Patrol
USC	United States Code
USFWS	United States Fish and Wildlife Service
UTM	Universal Transverse Mercator
W	Watt
CA	Wildlife Species of Concern in Arizona

## **1.0 INTRODUCTION**

### **1.1 PROJECT BACKGROUND**

The United States (U.S.) is experiencing high levels of drug use and ensuing elevated levels of drug-related crime. Negative impacts of widespread drug use on society continue to affect the work force, educational and medical systems, general law and order, and traditional family values and structure. As a result of these high levels of drug-related crime, the continual damage to our Nation's health and economy, and strains on vital relationships with international allies; the U.S. Congress developed the National Drug Control Strategy (NDCS) and incorporated the Department of Defense (DoD) in the new strategy. The Secretary of Defense established Joint Task Force Six (JTF-6) in November 1989 to coordinate all DoD counterdrug support to Federal, State, and local law enforcement agencies (LEAs) in an effort to curtail drug smuggling activities into the U.S. and protect national security. As a Joint Service Agency, JTF-6 was assigned to assist LEAs that have drug interdiction responsibilities in the continental U.S. by providing general operational and engineering support. In addition, this assistance would provide opportunities for mission-essential training for the military unit involved.

This Environmental Assessment (EA) addresses potential impacts associated with a proposed lighting project covering three main areas: 1) The portion covers approximately four miles along the southern U.S.-Mexico international border in Yuma County, Arizona. This segment is proposed to begin 100 feet east of the border fence and extend approximately two miles west to the east boundary of the truck POE at San Luis, Arizona. The western section of this portion would begin on the western boundary of the truck POE and extend west to the levee associated with the Wellton-Mohawk Bypass Drain adjacent to the Colorado River. 2) The second main areas covers approximately five miles along the Colorado River on the western boundary of the international border in Yuma County, Arizona. One segment extends north from the southwestern Arizona border to County Road 22. Another segment begins at 19 ½ Street, west of Gadsden and extends north to 18<sup>th</sup> street. The third segment begins at 9<sup>th</sup> street, west of Yuma, and extends north to 7<sup>th</sup> street. 3) The final area covers approximately 1,000 feet along the southern and western boundaries of the pedestrian Port of Entry (POE) public access parking lot of the Andrade Reservation in Imperial County, California. Figure 1.1 provides an overview map for the areas described above.

This document is tiered from the Programmatic Environmental Impact Statement (PEIS) completed for a broad scope of JTF-6 activities along the U.S.-Mexico border (U.S. Army 1994). As specific measures are developed for exact locations, EAs have been prepared and tiered from the PEIS, to address site-specific environmental constraints, including cumulative impacts of past, present, and foreseeable actions. This EA was prepared by Ecological Communications Corporation under contract to the Fort Worth District Army Corps of Engineers (USACE).

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## 1.2 LOCATION OF PROPOSED ACTION

The proposed project sites are located along the southern and western U.S.-Mexico international border in Yuma County, Arizona; and along the southeastern border of Imperial County, California. The Proposed Action is to install light poles along areas of the international border for a total of approximately 7.5 miles. The proposed lighting equipment and poles would be located either within the 60-foot U.S.-Mexico border right-of-way (ROW) or at a distance of 150 feet north of the international border. The proposed lights along the western segment would be located along a previously disturbed area adjacent to the levee and the POE parking lot. The proposed poles would be placed approximately 300 to 400 feet apart. Figures 1.2 through 1.4 show the various locations of the Proposed Action in detail.

## 1.3 PURPOSE AND NEED

The purpose of the Proposed Action and Alternatives is to decrease or eliminate the influx of illegal contraband (i.e., drugs, people, vehicles, etc.) from entering the U.S. and to reduce associated crime along the international border. The goal of the proposed project is to maximize the effectiveness of the U.S. Border Patrol (USBP) in their deterrent efforts. The Proposed Action involves the installation of pole-mounted lighting equipment along the international border for approximately 7.5 miles. The majority of this area currently consists of cleared roadway or levee ROW or land used for agricultural development. Photographs of the various site conditions are presented in Appendix A.

Overland smuggling poses a significant threat in these areas. Foot traffic from south to north and west to east across the international border was evident in the general project areas, as well as vehicle tracks over the driveable portions of some of the areas. The installation of lights along these areas would assist in reducing the flow of illegal entry into the U.S. and aid in the apprehension of drug traffickers. The proposed poles would increase the effectiveness of the USBP agents in detecting initial movement north across the border, thereby, reducing illegal traffic into the adjacent neighborhoods of San Luis, Gadsden, and Yuma, Arizona; as well as, into camping areas located adjacent to the international border in Imperial County, California.

Information provided by the USBP, Yuma Sector, indicated that the total number of aliens apprehended in Fiscal Year (FY) 1996 was 28,310. Likewise, apprehensions totaled to 30,177 in FY 1997 and 76,195 in FY 1998. The dollar value of narcotics (including marijuana, heroin, cocaine, methamphetamines, and others) seized in 1996 totaled to \$64,797,094. In 1997, this amount was reduced to \$37,384,845. According to USBP personnel, the reduction in dollar amount for narcotics seized could be attributed to reassignment of manpower to other border areas. In essence, the reassignment of personnel to other areas diluted the available manpower in the Yuma Sector. That, in turn, resulted in a reduction of seizures. However, in FY 1998, the dollar value of narcotics seized had increased back up to \$43,264,770. According to the USBP, this increase was mainly in the amount of marijuana seized (7,129.2 lbs in 1997 as compared to 28,514.3 lbs seized in 1998). The border fence, completed along the southern U.S.-Mexico international border, allowed



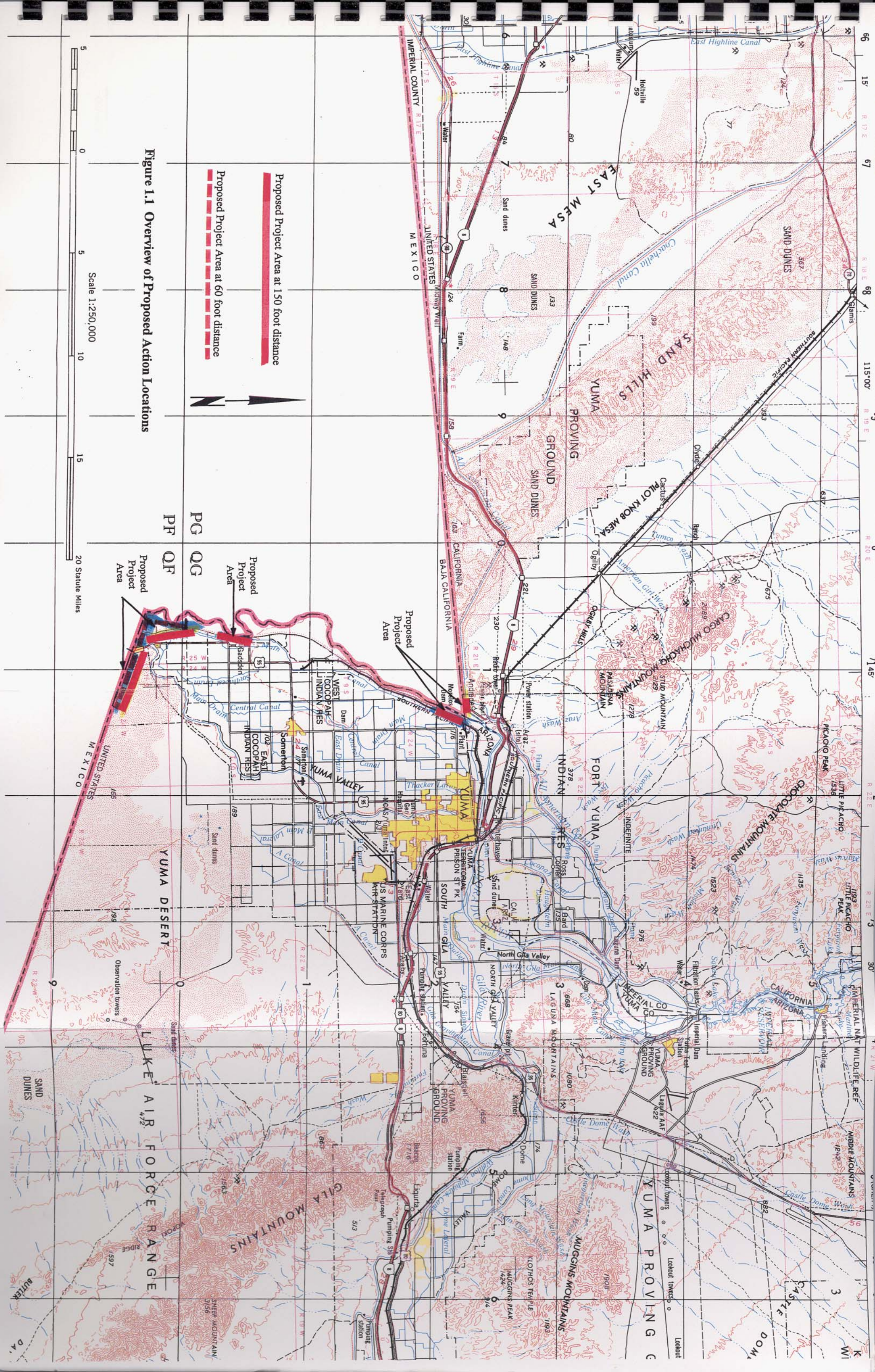


Figure 1.1 Overview of Proposed Action Locations



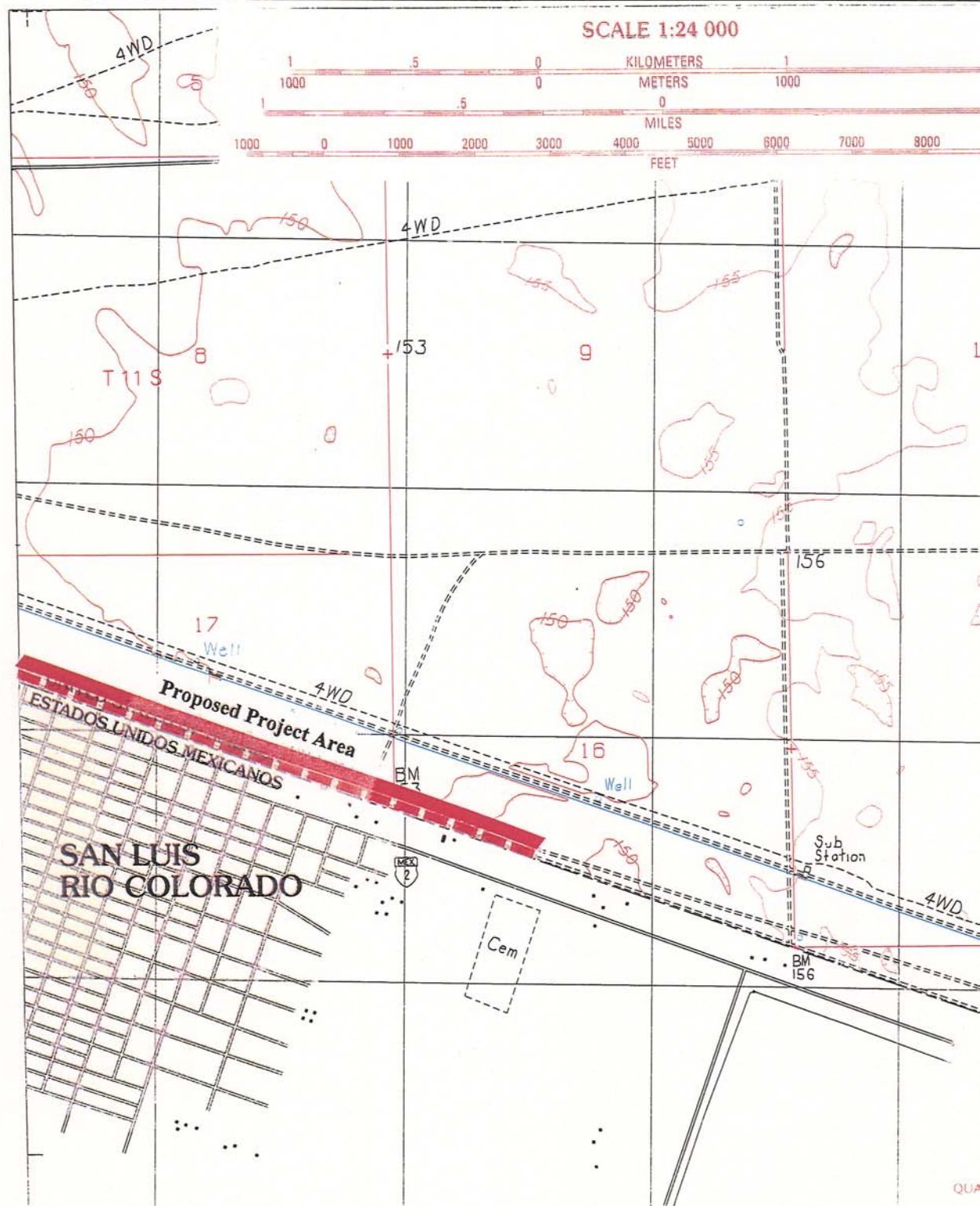


Figure 1.2 Location of Proposed Project Eastern Section of Yuma County, Arizona



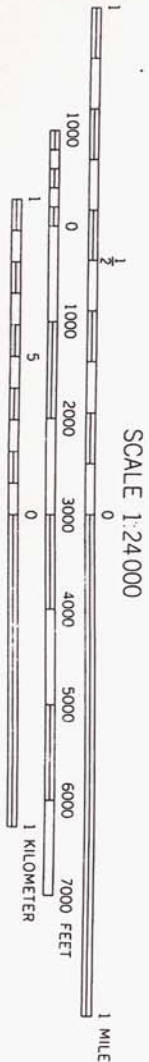
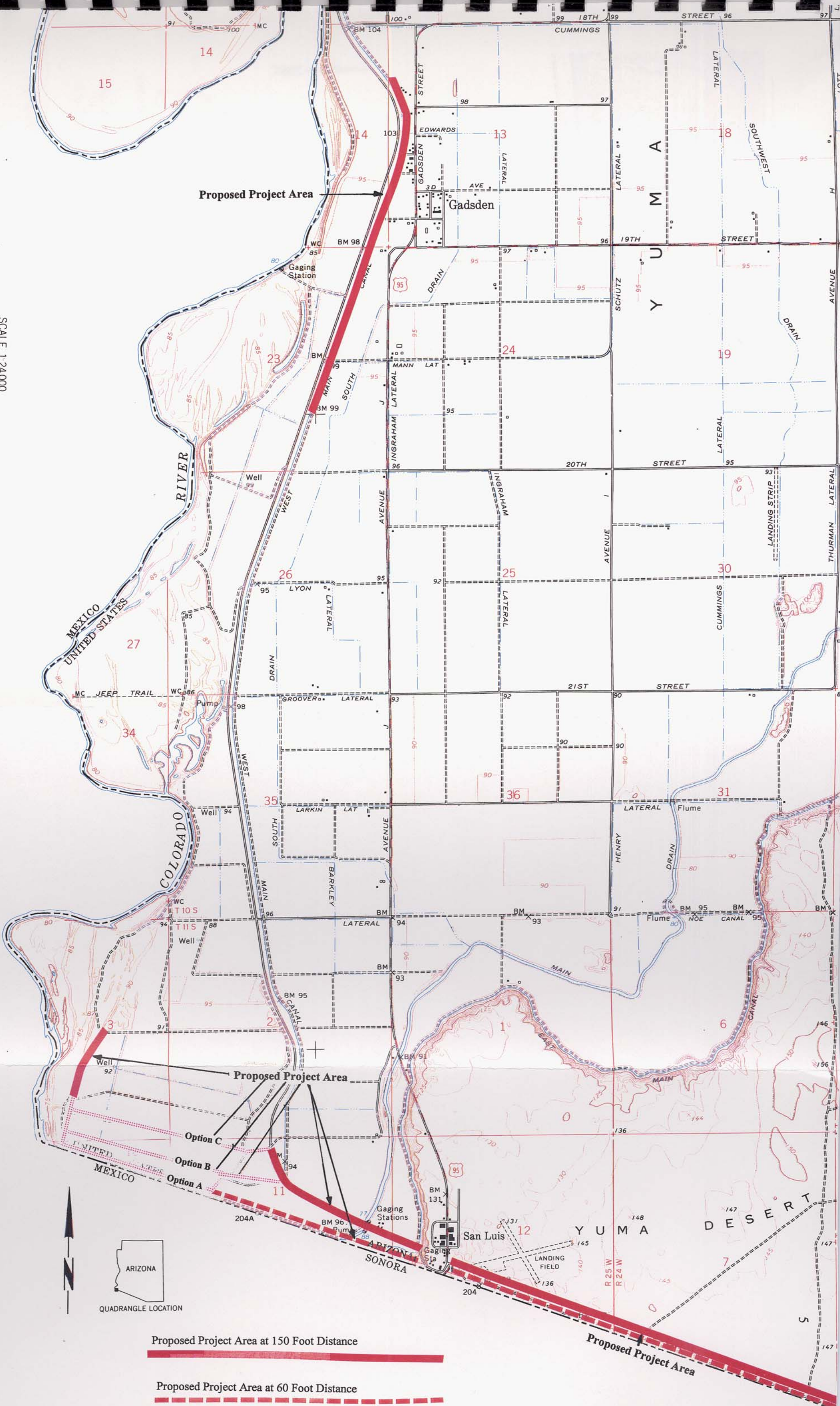


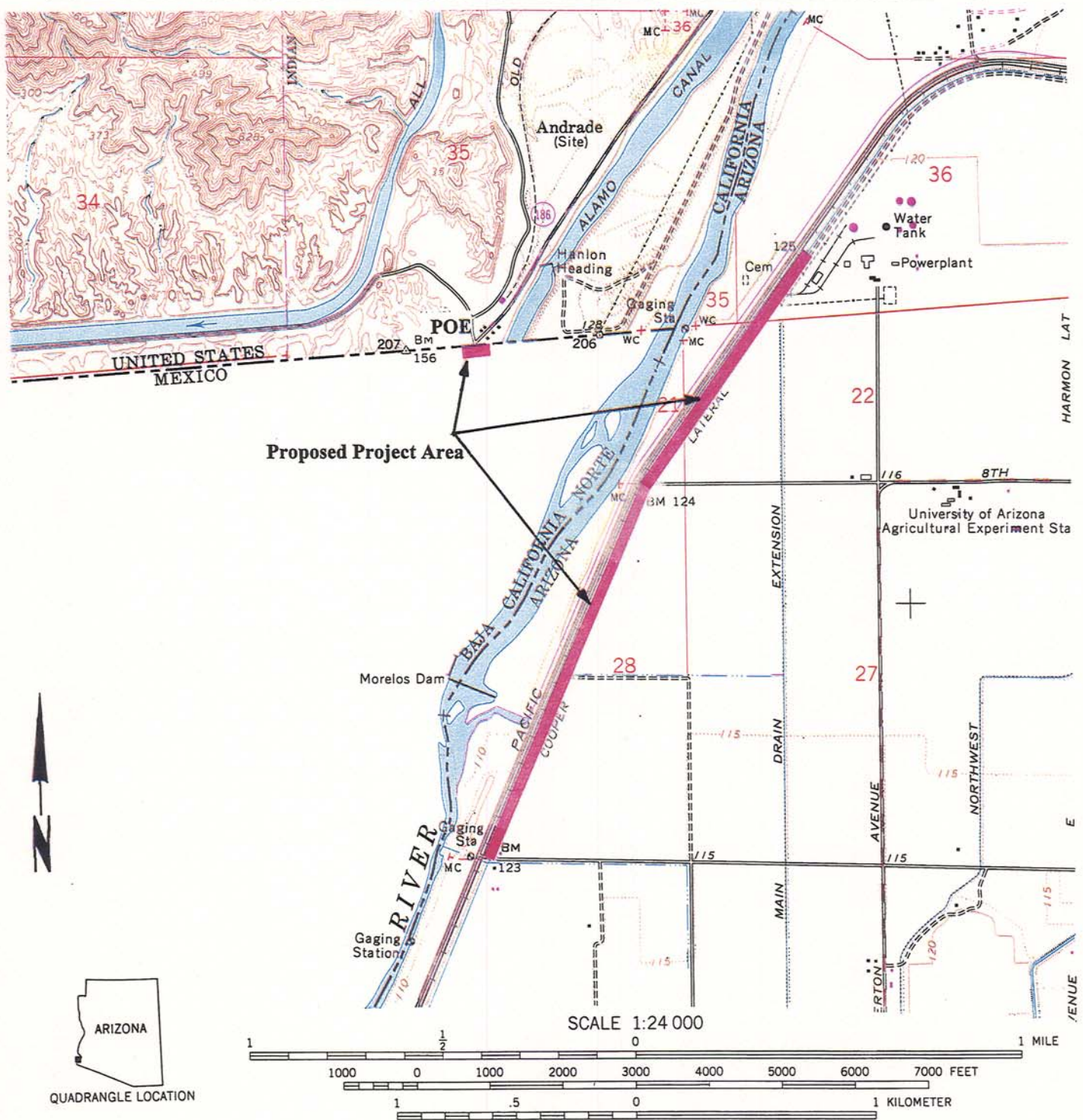
Figure 1.3 Location of Proposed Project Southwestern Section of Yuma County, Arizona and the Western Section of the Proposed Project area near Gadsden, Arizona.



Proposed Project Area at 150 Foot Distance

Proposed Project Area at 60 Foot Distance





**Figure 1.4 Location of Proposed Project Northern Section of Yuma County, Arizona and Southeastern Portion of Proposed Project in Imperial County, California.**

the existing manpower within the Yuma Sector to increase the number of total seizures by funneling criminal activity to breakpoints in the fence. Lights along the proposed project areas of the international border would make it more difficult to illegal drugs to be brought into the U.S. A secondary use of these poles could be the installation of camera equipment at a later date.

A secondary benefit of the Proposed Action, as well as a required goal for the DoD, is to provide training opportunities for U.S. military units. This training would include general operational and engineering support. This assistance would satisfy all or part of the units' mission-essential task list. Therefore, military units, through the JTF-6 program, could provide all the construction support for the proposed USBP project. Over the past several years, the USBP has been the primary beneficiary of JTF-6 support functions. However, any law enforcement agency involved in interdiction of illegal drugs may request assistance from JTF-6.

## **1.4 ORGANIZATION OF THE DOCUMENT**

Chapter 1.0 of this EA contains the background and location of the Proposed Action, along with the purpose and need, and any regulations associated with the Proposed Action. Chapter 2.0 gives a detailed analysis of the Proposed Action and all reasonable alternatives, including those that were considered but eliminated from detailed analysis. Chapter 3.0 describes the baseline environment conditions against which the Proposed Action and alternatives are evaluated. These environmental conditions include information on soils, air quality, land use, hydrology, biological resources, noise, cultural resources, and the current socioeconomic conditions of the area. Chapter 4.0 describes the environmental consequences of the Proposed Action and alternatives. Chapter 5.0 presents environmental design measures. Chapter 6.0 describes the public involvement for this project. Chapter 7.0 lists the preparers involved in the preparation of this document, and Chapter 8.0 presents references cited. Appendices included are: (A) Site Photographs, (B) Federal Air Pollutant Standards, (C) Threatened and Endangered Species, (D) Consultation Letters, and (E) Notice of Availability.

## **1.5 APPLICABLE ENVIRONMENTAL STATUTES AND REGULATIONS**

This EA was prepared pursuant to Section 102 of the National Environmental Policy Act of 1969 (NEPA), as implemented by the regulations promulgated by the President's Council on Environmental Quality (CEQ) [40 Code of Federal Regulations (CFR) Parts 1500-1508]. This EA should provide sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI) (40 CFR 1508.9). Additionally, this EA complies with Army Regulation (AR) 200-2, Environmental Effects of Army Actions (December 23, 1988). Brief summaries of the Federal and State laws, regulations, executive orders (EO), and other entitlements that may be applicable to the proposed project are provided in the following sections.

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### **1.5.1 Environmental Policy**

NEPA (42 United States Code [USC] 4321 et seq.), as implemented by the regulations promulgated by the President's CEQ (40 CFR Parts 1500-1508), establishes national policy, sets goals, and provides the means to prevent or eliminate damage to the environment. The principal objectives of NEPA are to ensure the careful consideration of environmental aspects of proposed actions in Federal decision-making processes and to look at alternatives that may provide a more environmentally acceptable solution. Additionally, NEPA ensures that environmental information is made available to decision makers and the public before decisions are made and actions are taken.

### **1.5.2 Executive Order 11514, Protection and Enhancement of Environmental Quality**

EO 11514, Protection and Enhancement of Environmental Quality, as amended by EO 11991, sets the policy for directing the Federal government in providing leadership in protecting and enhancing the quality of the nation's environment.

### **1.5.3 Executive Order 12898, Environmental Justice**

The purpose of EO 12898 is to avoid the disproportionate placement of adverse environmental, economic, social, or health impacts from proposed Federal actions and policies on minority and low-income populations.

### **1.5.4 Clean Air Act**

The Clean Air Act (CAA) amendments of 1990 established Federal air quality standards. According to air quality information received from Environmental Protection Agency (EPA) Region 9, Yuma County is in attainment with established national and state air quality standards for all criteria pollutants.

### **1.5.5 Clean Water Act**

The Clean Water Act (33 USC 1251 et seq., as amended) establishes Federal limits, through the National Pollutant Discharge Elimination System (NPDES), on the amounts of specific pollutants that may be discharged to surface waters in order to restore and maintain the chemical, physical, and biological integrity of the water. Section 404 of the Clean Water Act regulates the discharge of fill material into waters of the U.S. No NPDES permit would be required for the proposed project. Additionally, as the proposed project is not greater than five acres in size, a stormwater pollution prevention plan would not be required.

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### **1.5.6 Endangered Species Act**

The Endangered Species Act (16 USC 1531-1543) requires Federal agencies to determine the effects of their actions on endangered or threatened species of fish, wildlife, plants, and critical habitats, and to take steps to conserve and protect these species.

### **1.5.7 Cultural Resources Laws and Regulations**

The National Historic Preservation Act of 1966 (16 USC 470 et seq., as amended) and its implementing regulation 36 CFR Part 800 (Protection of Historic and Cultural Properties) requires Federal agencies to determine the effect of their actions on cultural resources, and to take certain steps to ensure these resources are located, identified, evaluated, and protected. The Archaeological Resources Protection Act (16 USC 470a-11, as amended) protects archaeological resources on Federal lands. If archaeological resources are discovered that may be disturbed during site activities, the NHPA would require permits for excavating and removing the resources. Additional regulations include the Native American Grave Protection and Repatriation Act of 1990 (NAGPRA) contained in 43 CFR Part 10.

### **1.5.8 Other Laws and Regulations**

Additional Federal, State, and local laws, regulations, and EOs that may apply to the Proposed Action and alternatives are listed below:

- American Indian Religious Freedom Act of 1978 (AIRFA)
- Arizona Native Plant Law
- Arizona Air Quality Standards
- Bald Eagle Protection Act (Public Law 90-535)
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (Public Law 96-510), as amended by the Superfund Amendments and Reauthorization Act (SARA) (Public Law 99-499), 1986
- Federal Compliance with Pollution Control Standards
- Federal Facilities Compliance Act
- Fish and Wildlife Coordination Act, as amended, USC 661, et seq.
- Hazardous Materials Transportation Act (HMTA), 1975
- Migratory Bird Treaty Act
- Native American Grave Protection and Repatriation Act of 1990 (NAGPRA)
- Resource Conservation and Recovery Act (RCRA) (Public Law 94-580), 1976
- Safe Drinking Water Act (SDWA), 1974
- Solid Waste Disposal Act, 1980
- Toxic Substances Control Act (TSCA) (Public Law 94-469)
- Watershed Protection and Flood Prevention Act, 16 USC 1101, et seq.
- Wetlands Conservation Act (Public Law 101-23)

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## 2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

This chapter describes the Proposed Action and all reasonable alternatives, including the No-Action Alternative. The Proposed Action would involve the installation of approximately 7.5 miles of lighting poles along the U.S.-Mexico border, in the southwest portion of Yuma County, Arizona and the southeast portion of Imperial County, California. Under the No-Action Alternative, there would be no lighting poles installed. The area would remain as it currently exists and USBP efforts to curtail illegal drug trafficking would remain unchanged. Other than the Use of Portable Lighting Systems Alternative, no other reasonable alternatives meeting JTF-6 or USBP requirements were identified or carried forward in this analysis.

### 2.1 PROPOSED ACTION

The Proposed Action is to install approximately 7.5 miles of new pole-mounted lighting equipment along the U.S.-Mexico border, in Yuma County, Arizona and Imperial County, California. The installation of a lighting system would allow for the illumination of the immediate border area, thus maximizing the USBP's ability to identify illegal entries during the night time hours, which is the period of greatest activity. Pole-mounted lights can be an effective deterrent to illegal drug trafficking. The USBP has stated that use of such lighting along the border has proven very effective in California (U.S. Army 1997c). A secondary use of these poles could be the installation of camera equipment at a later date.

The proposed lighting poles would connect to the existing poles located in the general project areas. The proposed project sites as shown in Figures 1.2 through 1.4 are described below.

1. The southeastern section of the Yuma County project area follows the existing border fence between San Luis, Arizona and Mexico. This section begins approximately 100 feet east of the end of the border fence and extends approximately two miles (10,560 feet) west to the east boundary of the truck POE at San Luis, Arizona. The poles would be placed either within the 60 feet ROW or at a line approximately 150 feet north of the international border. The 150-foot line is the preferred placement of the poles to allow for greater area illumination; however, land rights at this distance have not been secured as yet. At either distance, approximately 35 poles would be located in this segment (Figure 1.2).
2. The southwestern section of the Yuma County project area begins on the west side of the POE, on the west boundary of Friendship Park, and extends west to the Colorado River along one of three routes (Figure 1.3).

Route (A) would follow the existing border fence line and the proposed lighting poles would be placed within the 60-foot ROW. This route is located adjacent to an area used for crop production and extends west to the levee adjacent to the Wellton-Mohawk Bypass Drain (Figure 1.3).

Route (B) would extend from Friendship Park along the south side of the exiting levee west to the Colorado River. Under this option, from the point where the levee turns north, the pole line would continue west along a line approximately 150 feet north of the border fence, through an agricultural field, and continue west to the Wellton-Mohawk Bypass Drain. As stated above, the 150-foot line is the preferred route to allow for greater illumination; however, land rights for this area have not been obtained (Figure 1.3).

Route (C) would extend along the south side of the levee west of Friendship Park and curve to the north as the levee curves to the north. This route would then turn and extend west along County Road 23 to the Colorado River. The proposed poles would be placed along the east side of the Wellton-Mohawk Bypass Drain and on top of the maintenance road, in a previously disturbed area (Figure 1.3).

Each of these three routes is approximately two miles (10,560 feet) in length. Approximately 35 poles would be located along any of the above-referenced three routes. All three options would meet at the point where County Road 23 and the levee intersect. From this point the proposed pole line would extend north along the east side of the levee (2,000 feet) to County Road 22. Approximately 18 poles would be located in this area (Figure 1.3).

3. This segment is located west of Gadsden, beginning at 19½ Street and extending approximately 1.4 miles (7,392 feet) north to 18<sup>th</sup> street. The proposed poles would be placed between the east side of the Wellton-Mohawk Bypass Drain and the west toe of the Yuma Valley levee, on top of the maintenance road in an area previously disturbed. Approximately 25 poles would be located in this segment (Figure 1.3).
4. This segment is located west of Yuma, beginning at 9<sup>th</sup> Street and extending approximately 2 miles (10,560 feet) north to 7<sup>th</sup> Street. The proposed poles would be placed between the east side of the Wellton-Mohawk Bypass Drain and the west toe of the Yuma Valley levee, on top of the maintenance road in an area previously disturbed. Approximately 35 poles would be located in this segment (Figure 1.4).
5. This segment is located in Imperial County on the southern and western boundaries of the public access parking lot of the pedestrian POE at the Andrade Reservation on the Fort Yuma Indian Reservation (Quechan Tribe). This area covers approximately 1,000 feet and approximately 4-6 poles would be located in this segment (Figure 1.4).

In lieu of selecting exact pole locations, a 100 percent biological and cultural resource survey was conducted along a 10-meter wide corridor at each segment and for each option listed under that segment. In areas where permission to install light poles at the 150-foot line has not been secured, the survey covered both the 60-foot ROW and the 150-foot line.



The proposed lighting poles would be placed in previously disturbed areas. Installation activities would occur within a 10-meter radius at each pole site. Actual ground disturbance during construction would be less than five acres. The proposed poles would be concrete construction, approximately 40 to 45 feet in height. The poles would be placed below ground in a hole 6 to 10 feet deep, 16-18 inches in diameter and set in concrete to provide the necessary support for this structure. Four to six 1000-watt (W) high-pressure sodium floodlights protected with armored backs and side light shields would provide illumination. These shields direct the light toward specific areas and will protect the privacy of nearby residences. Electricity would be accessed from existing power poles adjacent to each proposed segment. To provide a continuous power source, poles would be placed approximately 300 to 400 feet apart. Poles located near the POE would not necessarily contain a light fixture, but may be used solely as a connection for the electrical supply.

The existing unimproved roads, which lead to each proposed pole site, would be used for access during installation. Minor road improvements could be necessary in some areas for equipment access to a pole site. The road improvements in this area were considered in a JTF-6 EA prepared in April 1994, and the improvements were consequently completed. Any grading found to be necessary as a result of the Proposed Action would be maintenance only and not construction of a new road; nor would these impacts exceed those described and analyzed for the previous action. In the event that the Proposed Action goes beyond minimal grading a Record of Environmental Consideration would be developed.

If the Proposed Action is implemented on the basis of this EA and a FONSI is issued, the proposed lighting project may begin when a military engineering unit is available in 1999. The project would take approximately six to eight weeks to complete. U.S. military engineer battalion personnel would perform the proposed project installation and road repair. It is anticipated that approximately 50 to 70 military personnel would be required to complete the Proposed Action and would be housed in Yuma, Arizona. Personnel completing the Proposed Action would be expected to work between 7:00 a.m. and 7:00 p.m., six days a week during the installation period.

Equipment to be used during pole installation and road improvements may include: integrated tool carriers, backhoes with augers or an auger truck, backhoes with breakers, flat bed trucks, graders, water trucks, cranes, and forklifts. Equipment and construction materials would be stored at a prefabrication yard in a previously disturbed area to be identified.

Existing roads would be utilized for transport of equipment and personnel. Existing turnouts would also be used by equipment during construction to eliminate unnecessary impacts to resources outside of the Proposed Action area. Through an environmental briefing, all personnel would be informed about the limits of the construction area and actions permitted within and outside of that area. Additionally, construction limits would be flagged to ensure that the proposed activities stay within the construction area boundaries.

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## **2.2 NO-ACTION ALTERNATIVE**

Under the No-Action Alternative, there would be no lighting poles installed. The area would remain as it currently exists and USBP efforts to curtail illegal drug trafficking would remain unchanged. Although no significant adverse impacts would occur if implemented, the No-Action Alternative would not support the USBP's efforts in effectively reducing drug smuggling and trafficking in southwestern Yuma County, Arizona and southeastern Imperial County, California. The associated drug-related crime would continue along the project area. Therefore, the No-Action Alternative may reduce the USBP's ability to fulfill their mission as described in Chapter 1.0.

## **2.3 USE OF PORTABLE LIGHTING SYSTEMS**

Another alternative considered was the increased use of portable lights. The portable lighting unit utilized by the USBP in many border areas is a Model BC4000LL, which consists of a six kilowatt (kW) diesel generator which powers four 1000-watt lights on a 15-foot mast. According to USBP personnel, the use of portable lighting systems has been marginally effective in the past. In comparison to the Proposed Action, a portable lighting system would require additional manpower. The portable lighting systems currently in use are frequent targets of vandalism; therefore, these systems would not be as effective a deterrent to drug trafficking activities. Power outages with a portable system would also be more frequent, and diesel generators required for this system could increase the potential for environmental concerns in the project areas. Although the portable lighting system was considered only marginally effective, it was carried through this document for further analysis.

## **2.4 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS**

### **2.4.1 Reduced Lighting Intensity**

An alternative that would reduce the intensity of the lighting would have been considered in response to the potential to interfere with nocturnal movement of any Federally listed threatened or endangered species. However, through informal consultation with U.S. Fish and Wildlife Service (USFWS) representatives, it was determined that there were no such species located in the proposed project areas. Therefore, this alternative was not further considered.



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### 3.0 AFFECTED ENVIRONMENT

The affected environment is the baseline against which potential impacts caused by the Proposed Action and alternatives are assessed. This chapter focuses on those resources specific to the proposed project area that have the potential to be affected by activities brought on by pole installation, minor road improvements, operation and maintenance of the system, and changes in USBP activities resulting from the construction activities. Resources that would most likely be affected (e.g., air, soil, cultural, biological resources, and noise) by the Proposed Action or alternatives are described in more detail than those not likely to be affected (e.g., water, socioeconomic, environmental justice, and aesthetics).

#### 3.1 AIR RESOURCES

Air resources describe the existing concentrations of various pollutants and the climatic and meteorological conditions that influence the quality of the air. Precipitation, wind direction, wind speed, and atmospheric stability are factors that determine the extent of pollutant dispersion.

##### 3.1.1 Climate and Meteorology

Southwestern Yuma County, Arizona and southeastern Imperial County, California are both located in the Sonoran Desert region, which is known for its warm winters. For this area, the average yearly daily maximum temperature is 87.3° Fahrenheit (F) and the average daily minimum temperature is 53.5° F. The average monthly temperature is 75.2° F and the average yearly rainfall in inches is 2.94 inches. The annual percent of sunshine (based on 4,400 hours per year) is 4,133 hours, or 90 percent. The average relative humidity at approximately 11:00 a.m. in July is 32 percent (City of Yuma 1997).

##### 3.1.2 Air Quality

The proposed project areas are located in EPA Region 9 and are in areas currently in attainment with established national and state air quality standards for all pollutants as listed in Appendix B (EPA 1996). According to EPA's Breathing Easier 1996 publication, Region 9 has shown a substantial improvement in air quality over the last 10 years. Despite an increase in auto travel of almost 50 percent over the past decade, air pollutant levels have decreased overall by about one-third. This decrease can be seen in both a reduction of the number of days in which the air pollution exceeded national air quality standards, and in a reduction in the actual air pollutant concentration levels for the six major pollutants.

#### 3.2 LAND USE

The proposed project areas lie outside of the city limits of San Luis, Gadsden, and Yuma, Arizona, and adjacent to the POE in Imperial County, California. The proposed areas for pole placement along the border are undeveloped or currently utilized for crop production. The nearest residential

areas are located within 0.5 miles from the proposed project areas. The proposed project areas are accessed primarily by the USBP and local landowners. Access to the proposed project sites is provided by undeveloped roads parallel to the border or the Bureau of Reclamation Yuma Valley Colorado River levee.

### **3.3 GEOLOGICAL RESOURCES**

Geological resources include physical surface and subsurface features of the earth such as topography, geology, soils, and the seismic nature of the area. These features are discussed in the following sections.

#### **3.3.1 Geology**

Southwest Arizona and southeast California both lie within the Basin and Range Physiographic Province, which is characterized by intensely deformed and intruded strata within numerous relatively elevated and depressed fault blocks. The Basin and Range Province is subdivided into two physiographic sub-provinces, the Mexican Highlands and the Sonoran Desert. The proposed project sites lie with the Sonoran Desert sub-province (U.S. Army 1994).

In the Sonoran Desert, the linear ranges, usually formed by volcanic uplift, are often surrounded by a skirt of detritus (boulders, rocks, gravel, sand, soil) that has eroded from the mountains over time. Much of this has been washed down during torrential summer downpours. In the southwest, these detritus skirts or pediments are frequently called bajadas. The substrate is coarser, with large rocks on the upper bajada and finer at the lower elevation.

The areas between the desert ranges have been filled with water-washed alluvium. This alluvium, or fine soil, produces the extensive flat spaces one usually associates with deserts. The water table may be high on the flatlands, and the drainage is often slow. Poorly drained patches and larger playas become alkaline through accumulation of soluble chemicals.

#### **3.3.2 Soils**

The majority of the soils in the proposed project areas are the Superstition Sand series. A secondary soil found in some areas is Gadsden clay.

Information received from the Natural Resource Conservation Service (NRCS) in Tucson Arizona indicates that soils in the Superstition Sand series consist of deep, somewhat excessively drained soils on old terraces of the Colorado River. These soils formed in mixed sandy alluvium with slopes range from zero to three percent. The Gadsden Clay series consists of deep, well drained soils on flood plains and low terraces. These soils formed in mixed fine-textured alluvium with slopes of less than one percent.

### 3.4 WATER RESOURCES

The following sections describe the surface and groundwater sources, water quality and quantity, and surface and subsurface water movement. The hydrological cycle results in the transport of water into various media such as the air, the ground surface, and subsurface. Natural and human-induced factors determine the quality of water resources.

#### 3.4.1 Groundwater

The following information on groundwater resources was obtained through the Arizona Department of Water Resources (ADWR). The majority of the proposed project areas lie within the Yuma basin which is divided into two major subdivisions based on water-bearing characteristics. The first subdivision forms the upper, principal-water producing part of the aquifer and consists of recent Colorado and Gila River alluvial deposits. Along the river valleys and Yuma mesa, the alluvium is further divided, in descending order, into the upper fine-grained zone, the coarse-gravel zone, and the wedge zone. The coarse-gravel zone is the principal water-producing unit.

The second subdivision constitutes the lower part of the basin and includes, in descending order, the Bouse Formation, marine sedimentary rocks, volcanic rocks, and non-marine sedimentary rocks. With the exception of the Bouse Formation and non-marine sedimentary rocks in the northern part of the area, these highly mineralized and deep units are not considered to be significant sources of groundwater (ADWR 1997).

Groundwater in southern California is supplied from two aquifers: the Basin-Fill and the Alluvium and Older Sediments (U.S. Army 1997a). Regional groundwater flow in the general region is to the southwest. Most groundwater recharge comes from the Colorado and Gila Rivers and infiltration of irrigation water. Only minor amounts are contributed by precipitation and local runoff. ADWR information estimates that approximately 1,000 acre-feet of groundwater enters the basin annually as underflow along the Gila River. When the Colorado River reaches flood stage, it becomes a losing stream and water begins to flow from the river to the groundwater system. During 1983 and 1984, large volumes of water were released from reservoirs upstream resulting in an increased river stage of 17 feet at the gauge in Yuma, Arizona.

Groundwater levels locally are controlled by the use of imported water, drainage ditches, and pumpage for irrigation and drainage. Depth to groundwater in 1988 ranged from less than two to over 500 feet below land surface but, in general, is less than 20 feet below land surface in agricultural areas (ADWR 1997).

### **3.4.2 Surface Water**

The majority of the proposed project sites are located in the Yuma basin that covers approximately 750 square miles of southwestern Arizona. It is bounded by the Gila and Laguna Mountains to the east, the Colorado and Gila Rivers to the north and west, and the Arizona-Mexico International Boundary to the south. Elevations within the basin range from 3,156 feet above mean sea level in the Gila Mountains to about 80 feet above mean sea level where the Colorado River crosses the International Boundary into Mexico (ADWR 1997).

Because of the arid conditions, no perennial streams originate in the area. The Colorado River receives most of its water from the Rocky Mountains of Colorado and is regulated by dams upstream. Historically, the Gila River was perennial; however, upstream diversions now consume the entire flow except during locally heavy rains.

The nearest surface water to the proposed project area in Yuma County, Arizona is the West Main Canal which will be adjacent to proposed pole sites and the Colorado River located within 0.5 miles of the westernmost portion of the proposed project area. Due to the location of these resources, the installation and operation of the proposed project should not have an impact to the resources.

No surface water resources are located adjacent to the proposed project area in Imperial County, California. The former Alamo Canal is located within 0.5 miles from the proposed project area; however, due to the distance from the proposed pole sites, the installation or operation of the proposed project should not have any impact to this surface water resource.

### **3.4.3 Water Quality**

According to the ADWR, water quality in the Yuma basin varies with depth and location. Total dissolved solids content in 1988 ranged from less than 1,000 to 4,000 milligrams per liter. Extensive groundwater contamination by agricultural pesticides and nitrates exists in the Yuma area. Volatile organic compound contamination has been reported at the Yuma Marine Corps Air Station (ADWR 1997).

Common sources of contamination of groundwater in southeastern California include irrigation return flow, application of pesticides, improper waste disposal, and untreated wastewater. Due to the fact that construction activities will not take place within 500 yards of the Colorado River, it is unlikely that the river's surface water quality would be impacted by either construction, installation, or operation of the proposed project.

## **3.5 BIOLOGICAL RESOURCES**

Biological resources include native plants and animals in the region around the proposed project sites. The proposed project area supports a plant community defined as desert grassland, a perennial

grass-scrub community that is usually located between desert scrub and higher elevation plant communities (Brown 1982). This habitat type is found in southwestern Arizona, southeastern California, and northern Mexico.

### **3.5.1 Vegetation**

The Sonora Desert is the hottest of the North American Deserts, but has a distinctly bimodal rainfall pattern that produces a high biological diversity. Trees are usually well developed on the desert ranges and their bajadas. Often abundant on these well-drained soils are blue paloverdes (*Cercidium floridum*), mesquite (*Prosopis glandulosa*), saltbush (*Atriplex canescens*), yucca (*Yucca spp.*), creosotebush (*Larrea tridentata*), desert broom (*Baccharis sarothroides*), catclaw acacia (*Acacia greggii*), and saguaro (*Cereus giganteus*). The understory consists of three, four or even five layers of smaller woody shrubs. Tall chollas (*Opeuntia spp.*) may occur in an array of species. The alluvial lowlands host communities of desert saltbush, wolfberry, and bursage. On coarser soils, creosotebush and bursage communities may stretch for miles. Where the water table is high, honey or velvet mesquite (*Prosopis spp.*) may form dense woodlands (Arizona Office of Tourism 1995).

General vegetation at the proposed project sites in southern Yuma County was sparse and consisted of saltbush, creosotebush, mesquite, and paloverde. Native grasses such as grama grasses (*Bouteloua curtipendula*, *B. gracilis*), sacaton (*Sporobolus wrightii*), Lehman's lovegrass (*Eragrostis lehmanniana*) were observed along the southern segment of the proposed project area. Seasonal crops were observed along the southwestern portion of the proposed project site. No vegetation was observed along the east side of the levee or in the parking lot of the Andrade Reservation where the proposed pole sites would be located.

### **3.5.2 Wildlife**

The Sonoran Desert is rich in animal life, with many species in all groups derived from tropical and subtropical regions. Common desert reptiles found in this region include the desert iguana (*Dipsosaurus dorsalis*), Gila monster (*Heloderma suspectum*), leopard lizard (*Gambelia wislizenii*), desert horned lizard (*Phrynosoma platyrhinos*), fringe-toed lizard (*Uma notata*), long-tailed brush lizard (*Urosaurus graciosus*), side-blotched lizard (*Uta stansburiana*), western whiptail (*Cnemidophorus tigris*), western blind snake (*Leptotyphlops humilis*), glossy snake (*Arizona elegans*), banded sand snake (*Chilomeniscus cinctus*), western shovel-nosed snake (*Chionactis occipitalis*), spotted leaf-nosed snake (*Phyllorhynchus decurtatus*), western patch-nosed snake (*Salvadora hexalepis*), sidewinder (*Crotalus cerastes*), and mojave rattlesnake (*Crotalus scutulatus*) (Arizona Office of Tourism 1995).

Common desert mammals found in this area include the coyote (*Canis latrans*), javelina (*Dicotyles tajacu*), jaguar (*Felis onca*), bighorn sheep (*Ovis candensis*), striped skunk (*Mephitis mephitis*), jackrabbit (*Lepus californicus*), Pallid bat (*Antrozous pallidus*), western pipistrelle (*Pipistrellus hesperus*), California myotis (*Myotis californicus*), California leaf-nosed bat (*Macrotus*

*californicus*), desert shrew (*Notiosorex crawfordi*), cactus mouse (*Peromyscus eremicus*), southern grasshopper mouse (*Onychomys torridus*), white-throated woodrat (*Neotoma albigula*), round-tailed ground squirrel (*Spermophilus tereticaudus*), Harris' antelope squirrel (*Ammospermophilus harrisi*), and desert cottontail (*Sylvilagus audubonii*).

Common birds species found in this area include the turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), Swainson's hawk (*Buteo swainsoni*), American kestrel (*Falco sparverius*), merlin (*Falco columbarius*), scaled quail (*Callipepla squamata*), mourning dove (*Zenaida macroura*), burrowing owl (*Speotyto cunicularia*), common poorwill (*Phalaenoptilus nuttallii*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), red-winged blackbird (*Agelaius phoeniceus*), cactus wren (*Campylorhynchus brunneicapillus*), and the greater roadrunner (*Geococcyx californianus*).

### **3.5.3 Aquatic**

Aquatic habitat is limited to that found in the Colorado River which is not located within the 10-meter wide corridor surveyed along the proposed project site. Although some small fish and turtles were noted in the canal, this type of concrete ditch does not offer a preferred aquatic habitat.

### **3.5.4 Threatened and Endangered Species**

Many Federally- and State-listed threatened and endangered species of plants, fish, and wildlife could occur in Yuma County, Arizona and Imperial County, California. A list of these species as provided by the ANHP and the USFWS can be found in Table 3-1. Of the species of concern by the USFWS and the ANHP, the flat-tailed horned lizard (*Phrynosoma mcallii*) was proposed for listing under the Endangered Species Act of 1973, as amended. However, the species was withdrawn once a Conservation Agreement was developed and implemented in the Yuma Desert Management Area. The proposed project areas are outside the Yuma Desert Management Area and possess only marginal habitat for the flat-tailed lizard (see Section 3.5.1). The preferred habitat of the flat-tailed lizard consists of areas of silica sand with scattered creosote bush, white bursage and some grasses (i.e. big galleta grass). The species is active from February to November, using burrows as protection from the harsh summer sun and during winter hibernation.

Other species of concern in the general project area include the Yuma clapper rail and the southwestern willow flycatcher. According to information received from the USFWS, the Yuma clapper rail prefers fresh water and brackish marshes. No habitat of this types was noted in or adjacent to the proposed project area. The preferred habitat for the southwestern willow flycatcher consists of cottonwood/willow and tamarisk vegetation communities along river and streams. Areas of this preferred habitat did exist in the general area; however, no habitat was located in or adjacent to any of the proposed project sites.

No evidence of any Federally- or State-listed threatened or endangered species were observed during the December site visit. Additional information on these species can be found in Appendix C.

**Table 3-1 List of Threatened, Endangered, or Species of Concern**

Common Name	Scientific Name	Federal Status			State Status		
		ESA	Critical Habitat	USFS	WSCA	NPE	NESL
Great Egret	<i>Ardea alba</i>			S	WC		
Western Yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>			S	WC		4
Snowy Egret	<i>Egretta thula</i>			S	WC		
Southwestern willow flycatcher	<i>Empidonax trallii extimus</i>	LE	Y		WC		2
Peregrine falcon	<i>Falco peregrinus</i>	LE					
Cactus ferruginous pygmy-owl	<i>Glaucidium brasilianum cactorum</i>	LE		S	WC		
Southwestern arroyo toad	<i>Bufo microscaphus californicus</i>	LE					
Least Bell's vireo	<i>Vireo bellii pusillus</i>	LE					
Black-necked stilt	<i>Himantopus mexicanus</i>			S			
California black rail	<i>Laterallus jamaicensis coturniculus</i>	SC			WC		
Yuma clapper rail	<i>Rallus longirostris yumanensis</i>	LE		S	WC		
Razorback sucker	<i>Xyrauchen texanus</i>	LE	Y	S	WC		2
California floater	<i>Anodonta californiensis</i>	SC					
Sonoran pronghorn	<i>Antilocapra americana sonoriensis</i>	LE		S			
Spotted bat	<i>Euderma maculatum</i>	SC		S	WC		
California leaf-nosed bat	<i>Macrotus californicus</i>	SC		S	WC		
Yuma myotis	<i>Muotis yumanensis</i>	SC					
Pinacate cactus mouse	<i>Peromyscus eremicus paragensis</i>	SC					
Pale townsend's big-eared bat	<i>Plecotus townsendii pallescens</i>	SC					
Yuma hispid cotton rat	<i>Sigmodon hispidus eremicus</i>	SC					
Parish onion	<i>Allium parishii</i>					SR	
Dune spurge	<i>Chamaesyce platysperma</i>	SC					
California snakewood	<i>Colubrina californica</i>			S			
Gander's cryptantha	<i>Cryptantha ganderi</i>	SC					
Dune sunflower	<i>Helianthus niveus tephrodes</i>	SC					
Senita	<i>Lophocereus schottii</i>						
Wiggin's cholla	<i>Opuntia wigginsii</i>					SR	
Sand food	<i>Pholisma sonorae</i>	SC				SR	
Kearney sumac	<i>Rhus kearneyi</i>					HS	
Blue sand lily	<i>Triteleopsis palmeri</i>					SR	
California fan palm	<i>Washingtonia filifera</i>					SR	
Desert rosy boa	<i>Charina trivirgata gracia</i>	SC					
Sonoran desert tortoise	<i>Gopherus agassizii</i>	SC		S	WC		
Gila Monster	<i>Heloderma suspectum</i>			S			
Flat-tailed horned lizard	<i>Phrynosoma mcalii</i>	SC			WC		
Mexican garter snake	<i>Thamnophis eques megalops</i>	SC		S	WC		
Cowles fringe-toed lizard	<i>Uma notata rufopunctata</i>	SC			WC		

ESA Endangered Species Act (1973 as amended).

LE Listed Endangered: imminent jeopardy of extinction

NESL Navajo Endangered Species List (1997).

NESL(2) Any species or subspecies which is in danger of being eliminated from all or a significant portion of its range on the Navajo Nation.

NESL(4) Any species or subspecies for which the Navajo Fish and Wildlife Department (NF&WD) does not currently have sufficient information to support their being listed in other groups but has reason to consider them.

- NPL Arizona Native Plant Law, Arizona Department of Agriculture. HS – Highly safeguarded, no collection allowed. SR – Salvage restricted, collection only with permit.
- S Sensitive: those taxa occurring on National Forests in Arizona that are considered sensitive by the Regional Forester.
- SC Species of Concern. The terms "Species of Concern" or "Species at Risk" should be considered as terms-of-art that describe the entire realm of taxa whose conservation status may be of concern to the USFWS, but neither term has official status.
- WSCA/WC Wildlife of Species Concern in Arizona. Species whose occurrence in Arizona is or may be in jeopardy, or with known or perceived threats or population declines, as described by the Arizona Game and Fish Department's listing of Wildlife of Special Concern in Arizona October 1996 Draft.
- USFS United States Forest Service
- Critical Habitat Y - critical habitat has been designated.

### 3.6 NOISE

The proposed project area is located away from noise sensitive sites such as schools, churches, hospitals, etc. The ambient noise environment within the general area is typical of rural areas with projected noise levels ranging from about 35 to 55 average-weighted decibels (dBA) day/night noise level (Ldn). These levels may be substantially higher when the wind blows (U.S. Army 1995). Current noise in this area is generated by USBP vehicles patrolling the border, agricultural vehicles, and vehicles passing on the Mexico highway next to the international border.

### 3.7 CULTURAL RESOURCES

Historic and archaeological resources are nonrenewable resources whose values may be easily diminished by physical disturbances. These resources are those items, places, or events considered important to a culture or community for reasons of history, tradition, religion, or science.

Aztlan Archaeology, Inc. (AAI) conducted a cultural resources inventory involving archival investigations (Class I overview) and a pedestrian survey (Class III survey) of the proposed project area on December 8-9, 1998. As the exact location of each individual pole has not been selected, a 100 percent coverage of the 10-meter wide corridor for the entire proposed project area was surveyed.

Prior to conducting the fieldwork, survey and site records at the Arizona State Museum (ASM) were reviewed for pertinent information, along with National Register of Historic Places listings, and AAI in-house records. Historic General Land Office (GLO) maps were also obtained from the Bureau of Land Management (BLM) Public Room in Phoenix, Arizona. This information indicated that only one, albeit extensive, survey had been carried out within one mile of the proposed project area. This survey, which was conducted by the Bureau of Reclamation (Aztlan Archaeology, Inc. 1992), recorded 30 sites, all historic.

The ASM files indicated that six sites have been previously recorded in or within a one-mile radius of the project area portion in Arizona. All of these sites were recorded in the above-mentioned survey. Only two of those sites (AZ X:6:43 and AZ X:6:63) are located in close proximity to the proposed project area. There was also a group of 12 sites indicated in California that are approximately one mile northwest of the California section of the project; however those sites are



separated from the proposed project area by Pilot Knob. The complete cultural report is available through the Arizona SHPO office.

Thirty-one historic GLO maps were available for the proposed project area and are discussed below by township and range.

Township 16 South, Range 21 East

The only GLO map available dates to 1961; no relevant historical information is provided.

Township 8 South, Range 24 West

GLO maps dating to 1901, 1909, 1930, 1956, 1962, and 1980 are available. The only relevant historical information provided is on the 1930 map, which shows the U.S.R.S. Levee and Railway extending north from Section 33 into the southern edge of Section 28.

Township 10 South, Range 25 West

GLO maps dating to 1874, 1901, 1930, 1955, 1958, and 1962 are available. The only relevant historical information provided is on the 1930 map, which shows two churches, a school, a post office, and a gin associated with the town of Gadsden in the SW  $\frac{1}{4}$  of Section 13. There are several other buildings indicated in the same area and in the SE  $\frac{1}{4}$  that may be residences. The U.S.R.S. Levee and Railway also is indicated as crossing through Sections 13 and 14.

Township 11 South, Range 25 West

GLO maps dating to 1909, 1948, 1956, 1961, 1965, 1972, 1980 (two maps), 1983, 1995 (two maps), and 1996 are available. The only relevant historical information provided is on the 1909 map, which shows homesteads for Isadore Carbajal and Ignacio Carbajal in the SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  of Section 12. Both homesteads are located north of the project area.

Township 11 South, Range 24 East

GLO maps dating to 1909, 1922, and 1980 are available; no relevant historical information is provided on any of the maps.

Township 16 South, Range 21 East (California)

Two GLO maps dating to 1872, and one dating to 1935 are available; no relevant historical information is provided on any of the maps.

Additionally, a Class III Archaeological Inventory of the entire project site was conducted on December 8 - 9, 1998. The survey was conducted at both the 60-foot ROW distance and the 150-foot distance along the southeast and southwestern portion of the proposed project area. At each distance, a 10-meter wide survey was conducted. Although the project area is only about 7.5 miles

in length, due to the double survey coverage along the southern route, an actual total of 9.5 miles were surveyed. Along the western and northwestern portions of the project a 10-foot wide corridor was surveyed.

### 3.8 AESTHETIC RESOURCES

Aesthetic resources consist of the natural and manmade landscape features that appear indigenous to the area and give a particular environment its visual characteristics. The current visual characteristics of all the project sites are an open sandy desert area, adjacent to agricultural development, or adjacent to the public parking area at the Andrade Reservation POE. Residential areas were located northwest of the southern segments of the proposed project areas in San Luis, Arizona. Additionally, the proposed project areas near Gadsden and Yuma, Arizona were also located near residential areas. Agricultural usage was also located adjacent to many of the proposed project areas.

Additionally, existing power and light poles are available or adjacent to most of the proposed project areas. The addition of the proposed light poles should not interfere or decrease the aesthetic views in the general project area.

### 3.9 SOLID AND HAZARDOUS WASTE

According to Yuma Sector USBP representatives, there is no known or suspected toxic and/or hazardous material contamination within the proposed project area. Additionally, there are no known historic land uses within the project area (such as industrial uses) that might have resulted in toxic or hazardous material contamination of the underlying soil and/or groundwater resources. However, due to the evidence of illegal and uncontrolled dumping of trash in immediate vicinity, it is possible that potentially hazardous wastes may have been dumped.

### 3.10 SOCIOECONOMIC DATA

Yuma County is located in the southwestern corner of Arizona near the borders of California; Sonora, Mexico; and Baja California, Mexico. Yuma County's 122,000 residents enjoy a lifestyle rich with history and culture. The City of Yuma encompasses 28.39 square miles. It is the third largest community in Arizona, with the fourth fastest growing metropolitan area in the Nation.

According to statistics provided by the city, the current population of Yuma is 67,143 and there are approximately 83,000 winter visitors to the Yuma, Arizona area annually. Military bases located in the county, such as the Marine Corps Air Station and Yuma Proving Grounds, contribute substantially to the local economy. The tourist industry which is mostly comprised of cross country travelers and winter visitors created an estimated gross revenue in 1995 of over \$380 million dollars in Yuma County, Arizona (City of Yuma 1997).

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Population estimates from the Census Bureau for 1990 indicated the population for Yuma County, Arizona was approximately 106,895. For 1990, the breakdown of race information indicates 80,702 listed as white; 3,056 as black; 1,429 as American Indian, Eskimo, or Aleut; 1,3931 as Asian or Pacific Islander; and 20,315 as other races. The 1997 estimate for Yuma County population is listed as approximately 130,016. County estimates in 1993 for median household income for Yuma County, Arizona ranges from \$20,760 to \$25,230. The labor force of Yuma County, Arizona in 1996 is listed as approximately 60,465, with an unemployment percent of 28.3 (U.S. Census Bureau, 1998).

Population estimates from the Census Bureau for 1990 indicated the population for Imperial County, California was approximately 109,303. For 1990, the breakdown of race information indicates 73,620 listed as white; 2,837 as black; 1,846 as American Indian, Eskimo, or Aleut; 2,171 as Asian or Pacific Islander; and 28,829 as other races. The 1997 estimate for Imperial County population is listed as approximately 143,706. County estimates in 1993 for median household income for Imperial County, California ranges from \$17,611 to \$22,789. The labor force of Imperial County, California in 1996 is listed as approximately 57,467, with an unemployment percent of 24.9 (U.S. Census Bureau, 1998).

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#### 4.0 ENVIRONMENTAL CONSEQUENCES OF THE PROPOSED ACTION

Based on discussions with USBP personnel, Federal and State agencies, and local authorities, as well as comparisons with similar USBP activities, several environmental factors potentially associated with the Proposed Action have been identified. An environmental consequence or impact is defined as a modification in the existing environment brought about by mission and support activities. Impacts can be beneficial or adverse, a primary result of an action (direct) or a secondary result (indirect), and can be permanent or long-lasting (long-term) or of short duration (short-term). Impacts can vary in degree from a slightly noticeable change to a total change in the environment.

Short-term impacts would occur along the border during and immediately after the construction of the proposed lighting project. For this project, short-term impacts are defined as those tied to the first two years following project implementation, whereas long-term impacts are those lasting more than two years.

Impact significant criteria are presented for each affected resource. These criteria are based on existing regulatory standards, scientific and environmental knowledge, and/or best professional judgment. Potential impacts for this project were classified at one of three levels: significant, insignificant (or negligible), and no impact. Significant impacts (as defined in CEQ guidelines 40 CFR 1500-1508) are effects that are most substantial, and therefore should receive the greatest attention in decision-making process. Insignificant impacts would be those impacts that result in changes to the existing environment that could not be easily detected. No-impact actions would not alter the existing environment. In the following discussions, impacts are considered adverse unless identified as beneficial.

Potential environmental consequences to each resource section include the following subcategories:

- Impacts. The level and duration of impacts that would occur as a result of the Proposed Action and the No-Action Alternative.
- Mitigation. Mitigation measures that could be applied to avoid or further reduce adverse impacts. Mitigation is discussed in Chapter 5.0.

Cumulative impacts and irreversible and irretrievable commitment of resources are discussed in separate sections following the discussions of each specific resource. Cumulative impacts are those which result from the incremental impacts of an action added to other past, present, and reasonably foreseeable actions, regardless of who is responsible for such actions. Irreversible and irretrievable impacts are permanent reductions or losses of resources that, once lost, cannot be regained.

This section of the EA will discuss only those environmental factors that would be impacted by the Proposed Action or the No-Action Alternative. Table 4-1 presents a comparison of the potential impacts by each area of concern.

**Table 4-1 Summary Comparison of Potential Impacts**

Area of Impact		Proposed Action	Use of Portable Lighting Alternative	No Action
Air Resources	ST:	Insignificant	Insignificant	No Impact
	LT:	No Impact	Insignificant	No Impact
Land Use	ST:	No Impact	Insignificant	No Impact
	LT:	No Impact	Insignificant	No Impact
Geological Resources	ST:	Insignificant	Insignificant	No Impact
	LT:	No Impact	Insignificant	No Impact
Water Resources	ST:	Insignificant	Insignificant	No Impact
	LT:	No Impact	No Impact	No Impact
Cultural Resources	ST:	Insignificant	Insignificant	No Impact
	LT:	No Impact	No Impact	No Impact
Biological Resources	ST:	Insignificant	Insignificant	Insignificant
	LT:	No Impact	Insignificant	Insignificant
Noise Resources	ST:	Insignificant	Insignificant	No Impact
	LT:	No Impact	Insignificant	No Impact
Aesthetic Resources	ST:	Insignificant	Insignificant	No Impact
	LT:	No Impact	Insignificant	No Impact
Solid/Hazardous Waste	ST:	No Impact	Insignificant	No Impact
	LT:	No Impact	Insignificant	No Impact
Socioeconomic	ST:	Beneficial	Beneficial	Insignificant
	LT:	Beneficial	Beneficial	Insignificant

ST = Short-term Impact.

LT = Long-term Impact.

Beneficial = Impact would be favorable, producing an overall benefit.

Insignificant = Perceptible, but not significant impacts.

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## **4.1 AIR RESOURCES**

### **4.1.1 Proposed Action**

Under the Proposed Action, exhaust pollutants would be created from on-site heavy equipment used for pole placement and vehicles bringing workers and building materials to the site. A truck-mounted gasoline-powered auger would be used during installation and an excavator would be used to install the poles. Additional equipment which could be used at the project site includes: a portable generator for welding activities; a crane for pole placement; a compressor for hand-operated tools; high-reach trucks for mounting lights, forklifts for moving materials, ready-mix trucks for hauling and pouring concrete, and trucks to deliver construction materials. It is assumed that as many as four pieces of heavy equipment could be used simultaneously during the construction phase. These pieces are typically moved on-site and remain for the duration of construction.

It was assumed that a 400 square feet of area (20 feet x 20 feet) would be disturbed at each pole location. This resulted in approximately 61,600 square feet or 1.4 acres of disturbed surface area (400 feet<sup>2</sup> x 154 pole sites). Approximately 50 to 70 people would be required to install the poles and light equipment. In the air quality considerations, it was assumed that 60 people would commute to and from the project site for an average period of 45 days.

Such increases or impacts on ambient air quality during the construction/installation phase would be expected to be short-term and insignificant, and can be reduced further through the use of standard dust control techniques, including roadway watering and using chemical dust suppressants. Although some fugitive dust will be associated with road use, it would not be significantly greater than amounts currently produced. There would be no emissions associated with operation of the lights, and no longer-term impacts would be expected to occur.

The Proposed Action would not require any permitting action and would not create any air emissions that would jeopardize the Federal attainment status of the Air Quality Region, or cause an exceedance in the allowable Prevention of Significant Deterioration (PSD) increment for the region. Additionally, any emissions created by the Proposed Action would not be within conformance of the State Implementation Plan (SIP).

### **4.1.2 No-Action Alternative**

Under the No-Action Alternative, baseline conditions would not change; therefore, no impact is expected from this alternative.

### **4.1.3 Use of Portable Lighting Systems Alternative**

Under this alternative, the use of the generators necessary to run the portable lighting systems will cause low amounts of air emissions. It will be necessary for these generators to run for

approximately 12 hours each day, depending on the season. There will be both short-term and long-term insignificant air impacts from the operations of this alternative.

## **4.2 LAND USE**

### **4.2.1 Proposed Action**

No impacts on land use would be expected from project-related activities, considering the ongoing disturbance caused by the illegal entry of drugs, people, vehicles, and associated criminal and violent activity. Installation of light and power poles would require the surface disturbance of approximately 400 square feet at each pole location. With the exception of the physical pole locations, other areas disturbed by construction activities would be insignificant, and would return to their original state over time. Project lighting would illuminate a large area that would otherwise be dark; however, less disturbance of the area is anticipated after the lighting system is installed because drug trafficking activity would be reduced in these areas.

Under the Proposed Action, the overall land use of the project areas adjacent to each pole site would not change. Additionally, there would be a beneficial effect as a result of an expected decrease of property damage in nearby cities of San Luis, Gadsden, and Yuma Arizona; as well as in Imperial County, California.

### **4.2.2 No-Action Alternative**

Under the No-Action Alternative, baseline conditions would not change. The areas would continue to be used for the illegal entry of drugs, people, vehicles, and associated criminal and violent activity.

### **4.2.3 Use of Portable Lighting Systems Alternative**

No impacts on land use would be expected from the use of portable lighting systems, considering the ongoing disturbance caused by the illegal entry of drugs, people, vehicles, and associated criminal and violent activity. However, the portable lighting systems would illuminate a smaller area than permanent lighting systems on higher poles and may not be as effective a deterrent as permanent light poles.

## **4.3 GEOLOGICAL RESOURCES**

### **4.3.1 Proposed Action**

It is not likely that geologic hazards such as seismic events, landslides, subsidence, or increased flooding would be impacted from either the installation of the light and power poles or the operation of the floodlights in the general project area. Likewise, installation and operation of the lights would not likely be impacted by a geologic hazard in the general project area. Additionally, no

permanent sanitary facilities are planned for the project sites, and any waste material generated during construction will be disposed of at an approved waste disposal site.

#### **4.3.2 No-Action Alternative**

No impacts to topography or physiography would be expected from the No-Action Alternative.

#### **4.3.3 Use of Portable Lighting Systems Alternative**

It is not likely that geologic hazards such as seismic events, landslides, subsidence, or increased flooding would be impacted from the use of portable lighting systems. Likewise, the use of these systems would likely not be impacted by a geologic hazard in the general project area.

However, the portable lighting systems rely on generators as a power source. Because of the fuels and lubricants associated with the generators, these systems could increase the potential for soil contamination due to maintenance concerns or vandalism. Additionally, there is no secondary containment with these systems.

### **4.4 WATER RESOURCES**

#### **4.4.1 Proposed Action**

The surficial aquifer is recharged from precipitation at the proposed project site and the surrounding areas. The Proposed Action would not be expected to increase the amount of paved areas within the general area; therefore, no impact to the surficial aquifer recharge area would be expected. No water usage would be expected for the operation of the Proposed Action, and only minimal water usage would be expected during the installation phase of the proposed project.

No deterioration of natural drainages, disruption of drainage patterns, or degradation of existing surface water quality is expected from project implementation. The Proposed Action is not expected to impact the water quality of the Colorado River that is located nearby the proposed project areas. All the pole locations will be selected to allow for minimal disturbance and to provide greater light coverage. None of the pole locations will be located within a surface water drainage or adjacent to a surface water resource. Additionally, there are no waters of the U.S. located within the project area; thus, a Section 404 permit for dredging or filling would not be required as a result of the Proposed Action. A stormwater pollution prevention plan would not be required as the total area of disturbance is less than 5 acres.

#### **4.4.2 No-Action Alternative**

No change in baseline conditions would be expected from the No-Action Alternative.



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#### **4.4.3 Use of Portable Lighting Systems Alternative**

The use of portable lighting systems would not be expected to impact the surficial aquifer recharge area, area natural drainages, or existing surface water resources adjacent to the proposed project areas. The portable units would be placed in selected sites that would allow for minimal disturbance and to provide greater light coverage. However, some environmental concerns could result from leakage of generator fuels or oils to the ground surface. During periods of rainfall, water runoff could carry the leaked substances into nearby drainage ways or surface, irrigation canals, or surface water resources.

### **4.5 BIOLOGICAL RESOURCES**

#### **4.5.1 Proposed Action**

A site visit was conducted on December 8-9, 1998 of the proposed project site by a Biologist from Ecological Communications Corporation. A 100-percent pedestrian survey of a 10-meter wide corridor was conducted along the 60-foot ROW and the 150-foot line north of the International Boundary. This survey was conducted in an effort to survey and inventory biological resources at the proposed project area, and evaluates the potential effects of the Proposed Action on these resources. Although the proposed project area will encompass approximately 7.5 miles of light poles, approximately 9.5 miles were surveyed to include all options associated with the Proposed Action.

Prior to the site reconnaissance survey, all available project-related literature was reviewed and information from the Arizona Natural Heritage Program (ANHP) and the USFWS was obtained regarding Federally and State-listed threatened and endangered species or special species of concern. Wildlife species noted during the December site visit included several domestic dogs (*Canidae*), several species of dove, sparrows and mockingbirds, burrowing owls, and domestic cattle. No other species were noted at that time. The only nesting site observed during the site investigation was a nest with two adult burrowing owls. This site was located in the eastern portion of segment No. 1, approximately 150 feet east of the USBP shed near the truck POE at San Luis, Arizona. Although the site was directly adjacent to the 60-foot ROW line, pole placement would be selected to avoid this site and minimize any impact to this species during construction.

##### **4.5.2.1 Vegetation**

Construction and installation for the proposed poles would disturb approximately 1.4 acres (20-foot by 20-foot disturbance zone for each of the 154 pole sites) of land. Most of the adjacent areas to each pole site have been previously disturbed either through grazing, agricultural production, levee construction, or road placement. Additionally, exact pole placement may be selected at any position within the entire 10-meter wide corridor, depending on best placement for avoiding sensitive vegetation with the project area. Therefore, a minimal amount of vegetation would be disturbed throughout the project area.

Insignificant impacts to native plant species protected by the Arizona Native Plant Law may occur during the installation phase of the proposed project. However, avoidance of areas in which these protected species occur would be implemented wherever possible in the siting of the poles. Coordination with the Arizona Department of Agriculture has been conducted to facilitate relocation of protected specimens, where necessary, with implementation of the Proposed Action.

Due to the high degree of previous disturbance at the proposed project sites and the regional abundance of the Arizona native plant species, planned installation activities or pole placement would not appear to significantly impact any native plant species. The existing access roads, levee, and agricultural crops adjacent to the project area support little native vegetation; therefore, only short-term, insignificant impacts to any vegetation would be expected in this area. No sensitive plant species were observed during the December 1998 site visit.

The long-term effect of night-time lighting on plant communities is a relatively new area of biological research. Evidence does exist that shows lights emitting energy over the 300 to 800 nanometer spectral range are effective in influencing the photosynthesis and photoresponses of plants. However, the amount of energy produced by the lights selected for this project would not be anticipated to be enough to produce any measurable effects on the plant communities present in the proposed project area (U.S. Army 1997c).

Additional information from the Texas A & M University (TAMU), Plant Sciences Department, indicates that the lighting effects from the proposed lighting system would not be expected to cause a negative impact on the agricultural crops in the proposed project area. Dr. Dan Lineberger with the TAMU Plant Sciences Department indicated that he believe the amount of light produced from the Proposed Action would not be of adequate wattage to affect the growth patterns of agricultural crops. Past studies have been conducted on the effects of street lighting disrupting the dormancy pattern for trees in the urban environment. These studies have shown that indirect low wattage lighting concerns on vegetation species is unfounded (Personal Communication, Dr. Dan Lineberger, TAMU, 1999).

#### 4.5.2.2 Wetlands and Floodplains

There are no wetlands or floodplains located on the Proposed Action site or adjacent to the Proposed Project area. The floodplains and wetlands associated with the Colorado River are located approximately one-eighth to one-fourth mile from the proposed project areas. These resources would not be impacted by the Proposed Action.

#### 4.5.2.3 Fish and Wildlife

The Proposed Action would have no impact on fish species because the proposed construction activities would not take place in or near flowing or standing water other than the concrete levee. The only wildlife species that could be impacted from the Proposed Action would be small

mammal, reptiles, and bird species. These impacts to such resources, such as foraging grass habitat and ground nesting habitat, would be insignificant due to the low amount of actual area disturbed by the Proposed Action. No long-term impacts to either small mammals, reptiles, and bird populations would be expected. Specific pole placement will be selected in the area near the burrowing owl nest to avoid negative impacts to this species and their nesting habitat.

Larger terrestrial wildlife movements in the proposed construction areas should not be affected due to the short duration of time for pole installation at each site. Additionally, pole installation activities would be conducted only during daylight hours. No construction activities would be conducted during the early morning hours or night time hours when wildlife species are most active. Therefore, impacts on wildlife species are expected to be short-term and minimal.

The long-term effect of an increased photoperiod on mobile wildlife species would be expected to be insignificant. Given the vast open area within the proposed project area, animals can easily relocate to adjacent unaffected areas. The proposed lighting project would not cause a constant lighting effect throughout the project areas, as there would be some areas of less light or no light between the individual light poles. The positioning of the proposed light poles will allow for some dark areas to still exist. In addition, the "internal clocks" of many species maintain the species' daily rhythms regardless of the extended presence of daylight or nighttime conditions (U.S. Army 1997c).

#### 4.5.2.4 Threatened and Endangered Species

Under the Endangered Species Act, formal consultation with the USFWS is required for any action that may affect Federally-listed species. Additionally, Federal agencies are required to ensure that any action authorized, funded, or carried out by such agencies would not be likely to jeopardize the continued existence of any threatened or endangered species. A copy of the consultation letters with the USFWS and Arizona Fish and Game Department is presented in Appendix D.

During the December 1998 survey of the proposed pole sites, there were no protected species or evidence of their potential habitat observed. Additional coordination with the USFWS indicated that none of the listed species are particularly sensitive to light; therefore, no long-term effect of an increased photoperiod on the wildlife species is expected to result in a potentially significant impact. Those species sensitive to light during typically dark hours would most likely avoid the area, and traverse by an alternative route.

Specific information for the southwestern willow flycatcher indicates their preferred habitat consists of cottonwood/willow and tamarisk vegetation communities along rivers and streams. Due to the distance of any of the proposed project sites from this type of habitat, it is not likely that the installation or operation of the proposed lights will impact the nesting areas for these species. Additional information for this species indicates their breeding season extends from late April to September. Due to the existing noise generated from the year-round agricultural development adjacent to many of the proposed sites, it is not anticipated that the noise generated from the

installation of the proposed light poles (typically lasting no more than two days at each site) would be long-term nor exceed the current noise conditions within the general project area to any extent which could cause an impact on the flycatcher or their preferred habitat.

No sensitive vegetation used as a food source for threatened or endangered species was observed within the proposed project areas during the December 1998 survey. Additionally, the amount of energy produced by the proposed project lighting would not be anticipated to produce any measurable effects on either the protected plant or animal communities present in the proposed project area (Personal Communication with USFWS, 1998).

Based on the information provided in Section 3.5.4 for both flora and fauna species, their preferred habitats, and lack of evidence that these species occur within the project area, it would be unlikely that any Federally-listed threatened or endangered species would be found within the proposed project area, except on a transient basis. Additionally, all sensitive vegetation would be avoided during the selection of individual pole locations. Therefore, the Proposed Action would have no affect on Federally-listed threatened and endangered species.

#### **4.5.2 No-Action Alternative**

Baseline conditions would not change under the No-Action Alternative; therefore, no impacts would be expected on biological resources.

#### **4.5.3 Use of Portable Lighting Systems Alternative**

Impacts to area vegetation would be similar to those of the Proposed Action. Individual sites would be selected to minimize vegetation impacts and maximize illumination. However, environmental concerns could arise from potential leakage of generator fuels or lubricants due to poor maintenance, normal wear and tear, or vandalism. Additionally, long-term impacts could include the impact of generator noise on wildlife species. The highest period of movement for most wildlife species occurs during night time or low daylight hours, which is consistent with the hours of continuous generator operation required for this system.

### **4.6 NOISE**

#### **4.6.1 Proposed Action**

Noise naturally dissipates by atmospheric attenuation as it travels through the air. Some other factors that can effect the amount of attenuation are ground surface, foliage, topography, and humidity. For each doubling of distance from the source, the noise level can be expected to decrease by approximately 6 decibels (dB). This method is a very conservative estimate of noise levels. A significant impact would be an increase in the ambient noise levels to a level of physical discomfort, or 120 A-weighted decibels (dBA).

Temporary construction noise impacts vary markedly because the noise intensity of construction equipment ranges widely as a function of the equipment and its level of activity. Short-term construction noise impacts tend to occur in discrete phases dominated initially by large earthmoving sources and later by hand-operated tools for finish construction. The noise produced by an assemblage of heavy equipment involved in urban, commercial, and industrial development typically ranges up to about 89 dBA at 50 feet from the source (U.S. Army 1995).

Over most of the proposed project area, receptors are located well beyond these distances. Only insignificant noise impacts are expected from the construction phase of the proposed project and no noise impacts are expected during the operation phase of the project. Additionally, given the heavy traffic noise resulting from the urban road and highway system in and around Yuma County, Arizona and Imperial County, California, the noise expected from the proposed construction activities would be short in duration (less than 30 to 60 days), and would be expected to be insignificant to existing noise levels.

#### **4.6.2 No-Action Alternative**

No change in baseline conditions would be expected under the No-Action Alternative.

#### **4.6.3 Use of Portable Lighting Systems Alternative**

As previously mentioned, long-term impacts to noise would include the impact of generator noise on wildlife species. The highest period of movement for most wildlife species occurs during night time or low daylight hours, which is consistent with the hours of continuous generator operation required for this system.

### **4.7 CULTURAL RESOURCES**

#### **4.7.1 Proposed Action**

As the exact location for each lighting pole has not been selected, AAI conducted a Class III archaeological survey (100% coverage) of a 10 meter-wide corridor for the entire proposed project area. Although the proposed project will encompass approximately 7.5 miles of light poles, approximately 9.5 miles of the 10-meter wide ROW was surveyed. No problems occurred during the survey and ground visibility was sufficient to allow good observation of the present ground surface.

No previously unknown archaeological sites or isolated artifacts were discovered in or near the proposed project areas. Numerous pieces of non-diagnostic recent (i.e., ca. 1950's to 1990's) trash consisting mostly of unidentifiable scraps of rusted metal, a few shards of broken glass containers (non sun-affected), plastic, and several bones showing butchering marks were observed along the 150-foot and 60-foot transects north of the border. The trash probably resulted from multiple incidents of isolated dumping and is not historic in age.

The two previously recorded historic sites noted within range of the proposed area are site AZ X:6:43, listed as the Yuma Valley Railroad, and site AZ X:6:63 listed as the West Main Canal. All construction activities in the immediate vicinity of these two sites will be conducted to avoid any impact to these sites. Consultation letters regarding cultural resources of the proposed project area are provided in Appendix D.

#### **4.7.2 No-Action Alternative**

No change in baseline conditions would be expected under the No-Action Alternative.

#### **4.7.3 Use of Portable Lighting Systems Alternative**

The placement of the portable lighting systems would be in areas previously disturbed, and is therefore, not likely to impact any cultural resources in the proposed project area.

### **4.8 SOLID AND HAZARDOUS WASTES**

#### **4.8.1 Proposed Action**

An accidental release or spill could occur as a result of fuels, oils, lubricants, and other hazardous or regulated materials brought on site for the proposed construction activities. A spill could result in potentially adverse impacts to on-site soils, and threaten the health of the local population, as well as wildlife and vegetation. However, the amounts of fuel and other lubricants and oils would be limited, and the equipment would be located on site to quickly limit any contamination. A spill prevention and response plan would be developed and implemented as part of the Proposed Action. Because of the random nature of illegal dumping along the border areas, it is difficult to determine the location and quantity of hazardous waste that may be present within the general project area. If hazardous materials or wastes are present, there would be a potential for exposure during construction activities. Construction personnel would be informed about the potential to encounter hazardous wastes that may be present on the site from dumping and the appropriate procedures to use if suspected hazardous contamination is encountered. Under the Proposed Action, it is assumed that worker-safety risks will be reduced through the implementation of standard safe practices, such as wearing hard hats, steel-toed boots, gloves, ear protection, face masks, safety vests, and other equipment, where appropriate and/or prescribed by State and/or Federal worker health and safety laws and regulations.

During installation activities, fuels, oils, lubricants, and other hazardous materials will be used. A Spill Response Prevention Plan will be in-place prior to construction, and all personnel will be briefed in the implementation and responsibilities of the plan.

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#### **4.8.2 No-Action Alternative**

No change in baseline conditions would be expected under the No-Action Alternative.

#### **4.8.3 Use of Portable Lighting Systems Alternative**

There could be an increased potential for accidental release or spills as a result of fuels, oils, lubricants used in the generators for the portable lighting systems. Such a spill could result in potentially adverse impacts to on-site soils, and threaten the health of the local population, as well as wildlife and vegetation. Additionally, there is no use of secondary containment for potential leaks from these systems.

### **4.9 SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE**

#### **4.9.1 Socioeconomics of Proposed Action**

The proposed lighting project would provide direct and indirect economic benefits to area companies and employees as a result of construction activities, and through economic multiplier effects. The beneficial impacts on the socioeconomic resources in the Region of Influence (ROI) such as population, employment, income, and business sales would be insignificant. The construction would be performed by military personnel transferred in for this project, and it would not be likely that additional hiring would occur within the local area. Additionally, the construction of the Proposed Action would not induce permanent in- or out-migration to the ROI. Therefore, overall area population would not be impacted.

Direct expenditures of the lighting project would have a minimal impact on employment, income, and sales within the ROI. Although most labor and some materials would be brought into the local area, some expenditures are expected to occur within the ROI. Short-term increase in local revenues for commercial establishments, trade centers, and retail sales will result from the purchase of supplies and equipment rental. Any potential impacts from the construction activities would easily be absorbed into the broader economy of the ROI.

The socioeconomic benefits resulting from the operation of the proposed lighting project would also be beneficial to the ROI. By decreasing drug trafficking and smuggling, the Proposed Action would contribute to the reduction of socioeconomic impacts and burdens that currently exist on local law enforcement and the medical community.

#### **4.9.2 Environmental Justice of Proposed Action**

EO 12898 of 11 February 1994 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," provided that each U.S. Federal agency shall identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its program, policies, and activities on minority and low income populations in the U.S.

The proposed construction sites are located in areas with similar characteristics of the broader ROI. Although some housing is located near the proposed pole sites, the area of lighting illumination would be directed away from the residences and toward the U.S.-Mexico border. As a result of this increased lighting, it would be expected that drug trafficking and associated violent crime would be reduced.

Additionally, installation or operation of the Proposed Action would not restrict the flow of legal visitation, trade, or immigration. Therefore, there would be no expected disproportionately high and adverse impacts on minority or low-income populations. Under the definition of EO 12898, there would be no adverse environmental justice impacts.

#### **4.9.2 No-Action Alternative**

Under the No-Action Alternative, the region would continue to experience immeasurable impacts to law enforcement agencies, medical institutions, and other socioeconomic organizations in the community as a result of continued drug trafficking, smuggling, and associated crime. There would be no impact to environmental justice or the socioeconomic resources in the ROI resulting from the No-Action Alternative.

#### **4.9.3 Use of Portable Lighting Systems Alternative**

Under this Alternative, the impacts would be similar to those of the Proposed Action. However, with these units, there may be an increase in vandalism due to the lower height of the light fixtures. Additionally, there will be an increase in maintenance costs to ensure the units are properly working. Due to these concerns, the portable lighting systems are considered to be less effective than permanent lighting structures.

### **4.10 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

Irreversible and irretrievable commitments of resources would include: a small amount of soil lost through wind and water erosion, a minor loss of small animal habitat due to pole placement, materials, energy and manpower expended during construction of the project, and higher level of noise generated from the construction activities.

### **4.11 CUMULATIVE IMPACTS**

The assessment of cumulative impacts is addressed in NEPA by its reference to interrelations of all components of the natural environment. The CEQ defined cumulative impact as the incremental impact of multiple present and future actions with individually minor but collectively significant effects. Cumulative impacts can be concisely defined as the total effect of multiple land uses and developments, including their interrelationships, on the environment (Bain *et al.* 1986).



In order to evaluate cumulative effects of the past and present JTF-6 actions, EAs from previous and current operations in the region, and the PEIS developed for all JTF-6 activities along the U.S.-Mexico border were evaluated. An analysis of each component of the affected environment was completed from the existing EAs in order to identify which actions would have cumulative impacts as a result of the past and proposed operations. This analysis revealed that land use, air quality, threatened and endangered species, and socioeconomic resources of past and proposed action areas would not be subjected to cumulative impacts due to the temporary nature of construction activities. Water and biological resources (i.e., vegetation and wildlife habitat) would be slightly affected cumulatively from past and proposed border construction actions. A positive cumulative impact has been realized by the additional cultural resource baseline data that has been gathered during the production of the various environmental documents, such as this environmental assessment.

The primary cumulative effect of the past and proposed action is the permanent loss of vegetation and associated wildlife habitat. As identified in the PEIS, the overall loss of vegetation falls below the projected level for the five year period, and accounts for less than 0.01 percent of the total land area along the entire U.S. - Mexico international border. Installation of lighting in the proposed project area may result in only an insignificant loss of vegetation and wildlife habitat since the total area of disturbance is relatively small and the area will re-vegetate following project implementation.

If a FONSI is developed and implemented, the Proposed Action would result in the loss of approximately 1.4 acres of degraded/disturbed vegetation. In the past, soil losses have been minimized through the implementation of erosion control measures including waterbars, gabions, reseeding, compaction, and slope control. Although the amount of soils saved is not quantifiable, JTF-6 operations have reduced existing erosion problems at numerous locations.

Air emissions have been produced by vehicles, aircraft, and heavy equipment. However, these have not resulted in significant cumulative impacts due to the short duration of the activities, the dispersion capabilities of the region, and the remote locations of most of the operations. Construction and maintenance activities have had cumulative positive impacts on socioeconomic resources within the border areas and the Nation, through reductions in illegal drug smuggling activities. Future impacts are anticipated to occur at a level consistent with past activities and not result in significant adverse effects (U.S. Army 1994).

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## 5.0 ENVIRONMENTAL DESIGN MEASURES

This chapter describes environmental design measures that would be implemented as part of the Proposed Action to reduce or eliminate impacts from pole installation. Due to the limited nature of the Proposed Action, construction impacts are expected to be slight; therefore, mitigation measures are only described for those resources with potential for impacts.

### 5.1 WATER RESOURCES

Standard construction procedures would be implemented to minimize the potential for erosion and sedimentation during construction. All work would cease during heavy rains and would not resume until conditions are suitable for the movement of equipment and material. As a result of the pole installation techniques, significant impacts on soils in the proposed construction area would not be expected. Additional mitigation measures, such as a Stormwater Pollution Prevention Plan for stormwater runoff from construction activities, will not be required for this project as the total area of disturbance is less than 5 acres.

### 5.2 AIR QUALITY

Mitigation measures would include dust suppression methods to minimize airborne particulate matter that would be created during construction activities and installation of the poles. Additionally, all construction equipment and vehicles would be required to be kept in good operating condition to minimize exhaust emissions. Standard construction practices would be used to control fugitive dust during the construction phases of the Proposed Action.

### 5.3 BIOLOGICAL RESOURCES

Impacts to existing vegetation during construction activities would be minimized through avoidance. Additional mitigation measures will include best management practices during construction to minimize or prevent erosion and soil loss. Pole placement will be selected to avoid all sensitive sites such as the borrowing owl nest observed along the southeastern portion of the site.

### 5.4 NOISE

During the construction phase, noise impacts are anticipated at local human receptors. As required by Occupational Safety and Health Administration (OSHA), earplugs will be worn by employees working in environments with continuous noise levels of 8 hours per day above 90 dBA. Because of the increased noise sensitivity during quiet hours, time limits on on-site construction activities are warranted for grading and the use of heavy equipment. On-site activities should be restricted to daylight hours on Monday through Saturday, except in emergency situations, and only maintenance to equipment permitted on Sundays. Additionally, all construction equipment should possess properly working mufflers and be kept in a proper state of tune to reduce backfires. Implementation of these measures will reduce the noise impact to an insignificant level.

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## 5.5 CULTURAL RESOURCES

Both historical properties located within the proposed construction corridor would be flagged by a qualified archaeologist and strictly avoided during construction activities. If archaeologists identify additional sites during flagging, then equipment operators will be notified, and these areas also would be avoided. The Arizona State Historic Preservation Officer (AZ SHPO), the California SHPO, and the Quechan Tribe would all be notified of any additional sites located during pole installation. Through avoidance, the Proposed Action would have no adverse effect on the cultural resources within the proposed project area.

## 5.6 SOLID AND HAZARDOUS WASTES

With proper handling, storage, and/or disposal of hazardous and/or regulated materials there would be no significant adverse impacts to onsite workers and neighboring flora and fauna. To minimize potential impacts from hazardous and regulated materials, all fuels, waste oils, and solvents would be collected and stored in tanks or drums within a secondary containment system that consists of an impervious floor and bermed sidewalls capable of containing the volume of the largest container stored therein.

The refueling of machinery would be completed following accepted guidelines, and all vehicles would have drip pans during storage to contain minor spills and drips. Although it would be unlikely for a major spill to occur, any spill of five gallons or more would be contained immediately within an earthen dike, and the application an absorbent (e.g., granular, pillow, sock, etc) would be used to absorb and contain the spill. Any major spill of a hazardous or regulated substance would be reported immediately to JTF-6 environmental personnel who would notify appropriate Federal and State agencies.

Additionally, all personnel would be briefed as to the correct procedures for preventing and responding to a spill. A Spill Prevention Plan would be in place prior to the start of construction, and all personnel shall be briefed on the implementation and responsibilities of this plan. Adoption and full implementation of the construction measures described above will reduce adverse hazardous/regulated substances impacts to insignificant levels.

All waste oil and solvents would be recycled if practicable. All non-recyclable hazardous and regulated wastes would be collected, characterized, labeled, stored, transported, and disposed of in accordance with all Federal, State, and local regulations, including proper waste manifesting procedures.

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## 6.0 PUBLIC INVOLVEMENT

This chapter discusses consultation and coordination that occurred in the preparation of this document. This includes contacts made during development of the Proposed Action, elimination of alternatives, and writing of the EA. Formal and informal coordination has been conducted with the following agencies:

- U. S. Army Corps of Engineers (Fort Worth District),
- Joint Task Force Six (JTF-6),
- Immigration and Naturalization Service (INS; USBP),
- State Historic Preservation Office (SHPO),
- U.S. Fish and Wildlife Service (USFWS),
- Bureau of Reclamation (BOR),
- Bureau of Indian Affairs (BIA),
- Quechan Indian Tribe,
- Colorado River Indian Tribes,
- Tohono O'odham Indian Nation,
- Hi C'ed O'odham Alliance,
- Arizona Department of Agriculture (ADA)
- Arizona Game and Fish Department,
- International Boundary and Water Commission (IBWC), and
- U.S. Department of Interior, Bureau of Land Management.

The Draft EA was made available for public review. The Notice of Availability (NOA) is included in Appendix E.

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**7.0 LIST OF PREPARERS**

Project Manager/ Ecologist	Jill Madden Ecological Communications Corporation B.S. in Wildlife and Fisheries Sciences Years of Experience: 17
Technical Editor/ Water Resources Specialist	Victor Palma Ecological Communications Corporation B.S. in Biology M.S. in Aquatic Biology Years of Experience: 19
Archaeologist	Robert A. Rowe Aztlán Archaeology, Inc. B.S. in Anthropology Certificate of Paleontology Years of Experience: 7
Air Quality Specialist	Rex G. McDonnell, III, P.E. McDonnell Engineering, Inc. B.S. in Chemical Engineering Years of Experience: 18
Document Production	Jody Willis Associated Consulting Engineers, Inc. Years of Experience: 5

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## 8.0 REFERENCES CITED

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**APPENDICES**



**APPENDIX A**

**Site Photographs**



Figure A-1 Beginning of eastern section in Yuma County near San Luis, Arizona. Note border fence in background. Photo taken at distance of 150-foot line, facing west.



Figure A-2 Photo of eastern section of Yuma County near San Luis, Arizona. Photo taken at 150-foot line, facing west. Note undeveloped border access road.





Figure A-3 Representative photo of eastern section in Yuma County, near San Luis, Arizona. Photo taken at 60-foot ROW line, facing west.



Figure A-4 Photo of Burrowing Owl nest with adult owl sitting at entrance to nest. Note undeveloped access road in foreground, border fence in background. Photo taken facing south.





Figure A-5 Beginning of southwestern section in Yuma County, near San Luis, Arizona. Note border fence on left side of photo, and levee on right side of photo. Photo taken facing west.



Figure A-6 View from top of levee road near San Luis, Arizona. Note canal below levee road and border fence in background on the left side of photo. Photo taken facing west.





Figure A-7 Photo of 60-foot ROW line looking across the Wellton-Mohawk Bypass Drain to the east (Route A in report). Note agricultural development on left side of photo, border fence on right.



Figure A-8 Photo of 150-foot line looking across Wellton-Mohawk Bypass Drain to the east (Route B in report). Note proposed route would run through agricultural development.





Figure A-9 Photo of County Road 23, looking from Wellton-Mohawk Bypass Drain toward Colorado River (Route C in report). Photo taken facing east.



Figure A-10. Representative photo taken between 19 ½ and 18<sup>th</sup> Streets, west of Gadsden, AZ. Note Wellton-Mohawk Bypass Drain on left. Photo taken facing north.





Figure A-11. Representative photo taken between 7<sup>th</sup> and 9<sup>th</sup> Streets, west of Yuma, AZ. Note Wellton-Mohawk Bypass Drain on left. Photo taken facing north.



Figure A-12. Representative photo taken at Andrade Reservation, Imperial County, CA. Photo taken on northwestern corner of parking lot, facing east. Note border fence on right side of photo.

**APPENDIX B**

**Federal and State Air Pollutant Standards**



## National Ambient Air Quality Standards\*

Air Pollutant	Type of Average	National Standards*	
		Primary <sup>(1)</sup> ( $\mu\text{g}/\text{m}^3$ )	Secondary <sup>(2)</sup> ( $\mu\text{g}/\text{m}^3$ )
Carbon Monoxide (CO)	1-hr	40,000	---
	8-hr	10,000	---
Inhalable Particulate Matter (PM <sub>10</sub> )	24-hr	150	---
	AAM <sup>(3)</sup>	50	---
Lead (Pb)	Calendar		
	Quarter	1.5	---
	3-months		
Nitrogen Dioxide (NO <sub>2</sub> )	AAM <sup>(3)</sup>	100	100
Ozone (O <sub>3</sub> )	1-hr	235	235
Sulfur Dioxide (SO <sub>2</sub> )	30-min	---	---
	3-hr	---	1,300
	24-hr	365	---
	AAM <sup>(3)</sup>	80	---
Total Suspended Particulate Matter (TSP)	1-hr	---	---
	3-hr	---	---
Hydrogen Sulfide (H <sub>2</sub> S)	30-min	---	---
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	1-hr	---	---
	24-hr	---	---
Inorganic Fluoride Compounds (as HF)	3-hr	---	---
	12-hr	---	---
	24-hr	---	---
	7-day	---	---
	30-day	---	---
	24-hr	---	---
Beryllium	24-hr	---	---
Other Hazardous and Odorous Pollutants	30-min	---	---
	AAM <sup>(3)</sup>	---	---

1 National Primary Standards establish the level of air quality necessary to protect the public health from any known or anticipated adverse effects of a pollutant, allowing a margin of safety to protect sensitive members of the population.

2 National Secondary Standards establish the level of air quality necessary to protect the public welfare by preventing injury to agricultural crops and livestock, deterioration of materials and property, and adverse impact on the environment.

3 Annual Arithmetic Mean.

4 If it affects a residential area, business, or commercial property.

5 If it affects only a property used for other than residential, recreational, business, or commercial purpose.

\* Adapted from 40 CFR 50.

**APPENDIX C**

**Threatened and Endangered Species Information**



# GAME & FISH DEPARTMENT

2221 West Greenway Road, Phoenix, Arizona 85023-4399 (602) 942-3000  
www.gf.state.az.us

*mt*  
**EV-EESS**  
*Linda*  
Governor  
Jane Dee Hull  
Commissioners:  
Chairman, Herb Gruenther, Tucson  
Michael M. Golightly, Flagstaff  
William Beria, Tucson  
M. Jean Hussell, Scottsdale  
Dennis D. Manning, Alpine  
Director  
Danne L. Shmule  
Deputy Director  
Thomas W. Spelding

Yuma Office, 8140 E County 10 1/2 Street, Yuma, AZ 85385-3686 (520) 342-0081

January 11, 1999

Mr. William Fickel, Jr.  
Chief, Environmental Division  
Department of the Army  
Fort Worth District, Corps of Engineers  
P.O. Box 17300  
Fort Worth, TX 76102-0300

Re: Proposed JTF-6 Activities Near Yuma and Naco, Arizona

Dear Mr. Fickel:

The Arizona Game and Fish Department (Department) has reviewed your letter dated December 11, 1998, requesting information on special status species for proposed project sites near Yuma and Naco, Arizona. The following information is provided for your consideration.

The Department's Heritage Data Management System has been accessed and current records show that the special status species listed below have been documented as occurring in the project vicinities.

## Project Site Near Yuma

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>	<u>STATUS</u>
flat-tailed horned lizard	<i>Phrynosoma mcallii</i>	WC
great egret	<i>Ardea alba</i>	WC, S
sand food	<i>Pholisoma sonora</i>	HS
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	LE, WC
Yuma clapper rail	<i>Rallus longirostris yumanensis</i>	LE, WC, S

## Project Site Near Naco

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>	<u>STATUS</u>
black-necked stilt	<i>Himantopus mexicanus</i>	S

Mr. William Fickel, Jr.

January 11, 1999

2

**STATUS DEFINITIONS**

- LE - Listed Endangered.** Species identified by the U.S. Fish and Wildlife Service under the Endangered Species Act as being in imminent jeopardy of extinction.
- WC - Wildlife of Special Concern in Arizona.** Species whose occurrence in Arizona is or may be in jeopardy, or with known or perceived threats or population declines, as described by the Department's listing of **Wildlife of Special Concern in Arizona** (WSCA, in prep.). Species included in WSCA are currently the same as those in **Threatened Native Wildlife in Arizona** (1988).
- S - Sensitive.** Species classified as "sensitive" by the Regional Forester when occurring on lands managed by the U.S.D.A. Forest Service.
- HS - Highly Safeguarded.** Those Arizona native plants whose prospects for survival in this state are in jeopardy or are in danger of extinction, or are likely to become so in the foreseeable future, as described by the Arizona Native Plant Law (1993).

At this time, the Department's comments are limited to the special status species information provided above. This correspondence does not represent the Department's evaluation of impacts to wildlife or wildlife habitat associated with activities occurring in the subject areas.

Thank you for the opportunity to provide this special status species information. Please send the Department a copy of the draft Environmental Assessment when it becomes available. If you have any questions, please contact me at 520-342-0091.

Sincerely,

*Russell K Engel*

Russell K. Engel  
Habitat Program Manager  
Region IV, Yuma

Mr. William Fickel, Jr.

January 11, 1999

3

cc: Larry Voyles, Regional Supervisor, Region IV

John Kennedy, Proj. Eval. Program Supervisor, Habitat Branch

AGFD# 12-16-98-12





In Reply Refer To:  
AESO/SE  
2-21-98-I-144

United States Department of the Interior  
Fish and Wildlife Service  
Arizona Ecological Services Field Office  
2321 W. Royal Palm Road, Suite 103  
Phoenix, Arizona 85021-4951  
(602) 640-2720 Fax (602) 640-2730



January 20, 1999

Mr. William Fickel, Jr.  
Chief, Environmental Division  
Department of the Army  
Corps of Engineers  
P.O. Box 17300  
Fort Worth, Texas 76102-0300

RE: Proposed JTF-6 Activities in Yuma and Naco, Arizona

Dear Mr. Fickel:

This letter responds to your December 11, 1998, request for an inventory of threatened or endangered species, or those that are proposed to be listed as such under the Endangered Species Act of 1973, as amended (Act), which may potentially occur in your project area (Cochise and Yuma Counties). The enclosed list may include candidate species as well. We hope the enclosed county list of species will be helpful. In future communications regarding this project, please refer to consultation number 2-21-98-I-144.

Please be aware that you may also access limited county species lists for Arizona on our internet web site at the following:

<http://ifw2cs.fws.gov/endspcs/lists/>

The enclosed list of the endangered, threatened, proposed, and candidate species includes all those potentially occurring anywhere in the county, or counties, where your project occurs. Please note that your project area may not necessarily include all or any of these species. The information provided includes general descriptions, habitat requirements, and other information for each species on the list. Also on the enclosed list is the Code of Federal Regulations (CFR) citation for each listed or proposed species. Additional information can be found in the CFR and is available at most public libraries. This information should assist you in determining which species may or may not occur within your project area. Site-specific surveys could also be helpful and may be needed to verify the presence or absence of a species or its habitat as required for the evaluation of proposed project-related impacts.

Endangered and threatened species are protected by Federal law and must be considered prior to project development. If the action agency determines that listed species or critical habitat may be adversely affected by a federally funded, permitted, or authorized activity, the action agency

must request formal consultation with the Service. If the action agency determines that the planned action may jeopardize a proposed species or destroy or adversely modify proposed critical habitat, the action agency must enter into a section 7 conference with the Service. Candidate species are those which are being considered for addition to the list of threatened or endangered species. Candidate species are those for which there is sufficient information to support a proposal for listing. Although candidate species have no legal protection under the Act, we recommend that they be considered in the planning process in the event that they become listed or proposed for listing prior to project completion.

If any proposed action occurs in or near areas with trees and shrubs growing along watercourses, known as riparian habitat, the Service recommends the protection of these areas. Riparian areas are critical to biological community diversity and provide linear corridors important to migratory species. In addition, if the project will result in the deposition of dredged or fill materials into waterways or excavation in waterways, we recommend you contact the Army Corps of Engineers which regulates these activities under Section 404 of the Clean Water Act.

The State of Arizona protects some plant and animal species not protected by Federal law. We recommend you contact the Arizona Game and Fish Department and the Arizona Department of Agriculture for State-listed or sensitive species in your project area.

The Service appreciates your efforts to identify and avoid impacts to listed and sensitive species in your project area. If we may be of further assistance, please feel free to contact Tom Gatz.

Sincerely,



David L. Harlow  
Field Supervisor

Enclosures

cc: Director, Arizona Game and Fish Department, Phoenix, AZ

## LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

YUMA

1/14/99

## 1) LISTED

TOTAL= 8

NAME: NICHOL'S TURK'S HEAD CACTUS

*ECHINOCACTUS HORIZONTHALONIUS VAR NICHOLII*

STATUS: ENDANGERED

CRITICAL HAB No RECOVERY PLAN: No CFR: 44 FR 61927, 10-26-1979

DESCRIPTION: BLUE-GREEN TO YELLOWISH-GREEN, COLUMNAR, 18 INCHES TALL, 8  
INCHES IN DIAMETER. SPINE CLUSTERS HAVE 5 RADIAL & 3 CENTRAL  
SPINES; ONE DOWNWARD SHORT; 2 SPINES UPWARD AND RED OR  
BASALLY GRAY. FLOWER: PINK FRUIT: WOOLLY WHITE

ELEVATION  
RANGE: 2400-4100 FT.

COUNTIES: PINAL, PIMA, YUMA

HABITAT: SONORAN DESERT SCRUB

FOUND IN UNSHADED MICROSITES IN SONORAN DESERT SCRUB ON DISSECTED ALLUVIAL FANS AT THE FOOT OF  
LIMESTONE MOUNTAINS AND ON INCLINED TERRACES AND SADDLES ON LIMESTONE MOUNTAIN SIDES.

NAME: SONORAN PRONGHORN

*ANTILOCAPRA AMERICANA SONORIENSIS*

STATUS: ENDANGERED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 32 FR 4001, 03-11-67

DESCRIPTION: BUFF ON BACK AND WHITE BELOW, HOOFED WITH SLIGHTLY CURVED  
BLACK HORNS HAVING A SINGLE PRONG. SMALLEST AND PALEST OF  
THE PRONGHORN SUBSPECIES.

ELEVATION  
RANGE: 2000-4000 FT.

COUNTIES: PIMA, YUMA, MARICOPA

HABITAT: BROAD, INTERMOUNTAIN ALLUVIAL VALLEYS WITH CREOSOTE-BURSAGE & PALO VERDE-MIXED CACTI  
ASSOCIATIONS

TYPICALLY, BAJADAS ARE USED AS FAWNING AREAS AND SANDY DUNE AREAS PROVIDE FOOD SEASONALLY.  
HISTORIC RANGE WAS PROBABLY LARGER THAN EXISTS TODAY. THIS SUBSPECIES ALSO OCCURS IN MEXICO

NAME: RAZORBACK SUCKER

*XYRAUCHEN TEXANUS*

STATUS: ENDANGERED

CRITICAL HAB Yes RECOVERY PLAN: Yes CFR: 55 FR 21154, 05-22-1990;

DESCRIPTION: LARGE (UP TO 3 FEET AND UP TO 16 POUNDS) LONG, HIGH SHARP-  
EDGED KEEL-LIKE HUMP BEHIND THE HEAD. HEAD FLATTENED ON TOP.  
OLIVE-BROWN ABOVE TO YELLOWISH BELOW.

ELEVATION  
RANGE: <8000 FT.

COUNTIES: GREENLEE, MOHAVE, PINAL, YAVAPAI, YUMA, LA PAZ, MARICOPA (REFUGIA), GILA, COCONINO, GRAHAM

HABITAT: RIVERINE & LACUSTRINE AREAS, GENERALLY NOT IN FAST MOVING WATER AND MAY USE BACKWATERS

SPECIES IS ALSO FOUND IN HORSESHOE RESERVOIR (MARICOPA COUNTY). CRITICAL HABITAT INCLUDES THE 100-  
YEAR FLOODPLAIN OF THE RIVER THROUGH GRAND CANYON FROM CONFLUENCE WITH PARIA RIVER TO HOOVER  
DAM; HOOVER DAM TO DAVIS DAM; PARKER DAM TO IMPERIAL DAM. ALSO GILA RIVER FROM AZ/NM BORDER TO  
COOLIDGE DAM; AND SALT RIVER FROM HWY 60/SR 77 BRIDGE TO ROOSEVELT DAM; VERDE RIVER FROM FS  
BOUNDARY TO HORSESHOE LAKE.

## LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

YUMA

1/14/99

NAME: BALD EAGLE

*HALIAEETUS LEUCOCEPHALUS*

STATUS: THREATENED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 60 FR 35999, 07-12-95

DESCRIPTION: LARGE, ADULTS HAVE WHITE HEAD AND TAIL. HEIGHT 28 - 38".  
WINGSPAN 88 - 96" 1-4 YRS DARK WITH VARYING DEGREES OF  
MOTTLED BROWN PLUMAGE. FEET BARE OF FEATHERS.

ELEVATION

RANGE: VARIES FT.

COUNTIES: YUMA, LA PAZ, MOHAVE, YAVAPAI, MARICOPA, PINAL, COCONINO, NAVAJO, APACHE, SANTA CRUZ, PIMA,  
GILA, GRAHAM, COCHISE

HABITAT: LARGE TREES OR CLIFFS NEAR WATER (RESERVOIRS, RIVERS AND STREAMS) WITH ABUNDANT PREY

SOME BIRDS ARE NESTING RESIDENTS WHILE A LARGER NUMBER WINTERS ALONG RIVERS AND RESERVOIRS.  
AN ESTIMATED 200 TO 300 BIRDS WINTER IN ARIZONA. ONCE ENDANGERED (32 FR 4001, 03-11-1967; 43 FR 6233, 02-  
14-78) BECAUSE OF REPRODUCTIVE FAILURES FROM PESTICIDE POISONING AND LOSS OF HABITAT. THIS  
SPECIES WAS DOWN LISTED TO THREATENED ON AUGUST 11, 1995. ILLEGAL SHOOTING, DISTURBANCE, LOSS OF  
HABITAT CONTINUES TO BE A PROBLEM.

NAME: BROWN PELICAN

*PELECANUS OCCIDENTALIS*

STATUS: ENDANGERED

CRITICAL HAB No RECOVERY PLAN: Yes CFR: 35 FR 16047, 10-13-70: 35

DESCRIPTION: LARGE DARK GRAY-BROWN WATER BIRD WITH A POUCH UNDERNEATH  
LONG BILL AND WEBBED FEET. ADULTS HAVE A WHITE HEAD AND  
NECK, BROWNISH BLACK BREAST, AND SILVER GRAY UPPER PARTS.

ELEVATION

RANGE: VARIES FT.

COUNTIES: LA PAZ YUMA

HABITAT: COASTAL LAND AND ISLANDS

SUBSPECIES IS FOUND ON PACIFIC COAST AND IS ENDANGERED DUE TO PESTICIDES. IT IS AN UNCOMMON  
TRANSIENT IN ARIZONA ON LOWER COLORADO RIVER. INDIVIDUALS WANDER UP FROM MEXICO IN SUMMER AND  
FALL. NO BREEDING RECORDS IN ARIZONA.

NAME: CACTUS FERRUGINOUS PYGMY-OWL

*GLAUCIDUM BRASILIANUM CACTORUM*

STATUS: ENDANGERED

CRITICAL HAB Yes RECOVERY PLAN: No CFR: 62 FR 10730, 3-10-87

DESCRIPTION: SMALL (APPROX. 7"), DIURNAL OWL REDDISH BROWN OVERALL WITH  
CREAM-COLORED BELLY STREAKED WITH REDDISH BROWN. SOME  
INDIVIDUALS ARE GRAYISH BROWN

ELEVATION

RANGE: &lt;4000 FT.

COUNTIES: MARICOPA, YUMA, SANTA CRUZ, GRAHAM, GREENLEE, PIMA, PINAL, GILA, COCHISE

HABITAT: MATURE COTTONWOOD/WILLOW, MESQUITE BOSQUES, AND SONORAN DESERT SCRUB

RANGE LIMIT IN ARIZONA IS FROM NEW RIVER (NORTH) TO GILA BOX (EAST) TO CABEZA PRIETA MOUNTAINS  
(WEST). ONLY A FEW DOCUMENTED SITES WHERE THIS SPECIES PERSISTS ARE KNOWN, ADDITIONAL SURVEYS  
ARE NEEDED. LISTING EFFECTIVE APRIL 9, 1997 PROPOSED CRITICAL HABITAT IN PIMA, COCHISE, PINAL, AND  
MARICOPA COUNTIES (64 FR 71821).

## LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

YUMA

1/14/99

NAME: SOUTHWESTERN WILLOW FLYCATCHER *EMPIDONAX TRILLII EXTIMUS*

STATUS: ENDANGERED CRITICAL HAB Yes RECOVERY PLAN: No CFR: 60 FR 10694. 02-27-95

DESCRIPTION: SMALL PASSERINE (ABOUT 6") GRAYISH-GREEN BACK AND WINGS.  
WHITISH THROAT. LIGHT OLIVE-GRAY BREAST AND PALE YELLOWISH  
BELLY. TWO WINGBARS VISIBLE. EYE-RING FAINT OR ABSENT.ELEVATION  
RANGE: <8500 FT.COUNTIES: YAVAPAI, GILA, MARICOPA, MOHAVE, COCONINO, NAVAJO, APACHE, PINAL, LA PAZ, GREENLEE, GRAHAM,  
YUMA, PIMA, COCHISE, SANTA CRUZ

HABITAT: COTTONWOOD/WILLOW &amp; TAMARISK VEGETATION COMMUNITIES ALONG RIVERS &amp; STREAMS

MIGRATORY RIPARIAN OBLIGATE SPECIES THAT OCCUPIES BREEDING HABITAT FROM LATE APRIL TO  
SEPTEMBER. DISTRIBUTION WITHIN ITS RANGE IS RESTRICTED TO RIPARIAN CORRIDORS. DIFFICULT TO  
DISTINGUISH FROM OTHER MEMBERS OF THE EMPIDONAX COMPLEX BY SIGHT ALONE. TRAINING SEMINAR  
REQUIRED FOR THOSE CONDUCTING FLYCATCHER SURVEYS. CRITICAL HABITAT ON PORTIONS OF THE 100-YEAR  
FLOODPLAIN ON SAN PEDRO AND VERDE RIVERS, WET BEAVER AND WEST CLEAR CREEKS. INCLUDING TAVASCI  
MARSH AND ISTER FLAT; THE COLORADO RIVER, THE LITTLE COLORADO RIVER, AND THE WEST, EAST, AND  
SOUTH FORKS OF THE LITTLE COLORADO RIVER. REFERENCE 60 CFR:62 FR 39129. 7/22/97.

NAME: YUMA CLAPPER RAIL

*RALLUS LONGIROSTRIS YUMANENSIS*STATUS: ENDANGERED CRITICAL HAB No RECOVERY PLAN: Yes CFR: 32 FR 4001, 03-11-67: 48  
FR 34182. 07-27-83DESCRIPTION: WATER BIRD WITH LONG LEGS AND SHORT TAIL. LONG SLENDER  
DECURVED BILL. MOTTLED BROWN ON GRAY ON ITS RUMP, FLANKS  
AND UNDERSIDES ARE DARK GRAY WITH NARROW VERTICAL STRIPES  
PRODUCING A BARRING EFFECT.ELEVATION  
RANGE: <4500 FT.

COUNTIES: YUMA, LA PAZ, MARICOPA, PINAL, MOHAVE

HABITAT: FRESH WATER AND BRACKISH MARSHES

SPECIES IS ASSOCIATED WITH DENSE EMERGENT RIPARIAN VEGETATION. REQUIRES WET SUBSTRATE  
(MUDFLAT, SANDBAR) WITH DENSE HERBACEOUS OR WOODY VEGETATION FOR NESTING AND FORAGING.  
CHANNELIZATION AND MARSH DEVELOPMENT ARE PRIMARY SOURCES OF HABITAT LOSS.

FROM

(FRI) 01. 29' 99 09:56/ST. 09:48/NO. 3561627740 P 18/19

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

YUMA

1/14/99

### 3) CANDIDATE

TOTAL=1

NAME: MOUNTAIN PLOVER

*CHARADRIUS MONTANUS*

STATUS: CANDIDATE

CRITICAL HAB No RECOVERY PLAN: No CFR:

DESCRIPTION: WADING BIRD; COMPACTLY BUILT; IN BREEDING SEASON WITH WHITE

FOREHEAD AND LINE OVER THE EYE; CONTRASTING WITH DARK

CROWN: NONDESCRIPT IN WINTER. VOICE IS LOW, VARIABLE WHISTLE. ELEVATION

RANGE, VARIABLE FT.

COUNTIES: YUMA, SANTA CRUZ, PIMA, COCHISE, PINAL, APACHE

HABITAT: OPEN ARID PLAINS, SHORT-GRASS PRAIRIES, AND SCATTERED CACTUS.

AZ PROVIDES WINTERING HABITAT ONLY. SPECIES PRIMARILY FOUND IN ROCKY MOUNTAIN STATES FROM CANADA TO MEXICO

FROM

(FRI) 01. 29' 99 09:56/ST. 09:48/NO. 3561627740 P 19/19

LISTED, PROPOSED, AND CANDIDATE SPECIES FOR THE FOLLOWING COUNTY:

YUMA

1/14/99

## CONSERVATION AGREEMENT

TOTAL= 1

NAME: FLAT TAILED HORNED LIZARD

*PHRYNOSOMA MCALLII*

STATUS: NONE

CRITICAL HAB No RECOVERY PLAN: No CFR:

DESCRIPTION: TYPICAL FLATTENED BODY SHAPE OF HORNED LIZARDS; DARK  
VERTEBRAL STRIPE, LACKS EXTERNAL EAR OPENINGS, COLOR IS  
CRYPTIC RANGING FROM PALE GRAY TO LIGHT RUST BROWN; HAS  
TWO ROWS OF FRINGED SCALES ON EACH SIDE OF BODY

ELEVATION

RANGE: 500 FT. FT.

COUNTIES: YUMA

HABITAT: SANDY FLATS OR AREAS WITH FINE, WINDBLOWN SAND; CREOSOT-WHITE BURSAGE SERIES OF  
SONORAN-DESERT

CONSERVATION AGREEMENT FINALIZED IN MAY 1997. SPECIES ALSO FOUND IN PORTIONS OF SAN DIEGO  
COUNTY, CENTRAL RIVERSIDE COUNTY, AND IMPERIAL COUNTY, CALIFORNIA; ALSO SONORA AND BAJA  
CALIFORNIA, MEXICO



**APPENDIX D**

**Consultation Letters**

REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
**FORT WORTH DISTRICT, CORPS OF ENGINEERS**  
P. O. BOX 17300  
FORT WORTH, TEXAS 76102-0300  
December 11, 1998

Environmental Division

SUBJECT: Proposed JTF-6 Activities in Yuma and Naco, Arizona

Mr. Sam Spiller  
U.S. Fish and Wildlife Service  
3616 W. Thomas, Suite 6  
Phoenix, Arizona 85019

Dear Mr. Spiller:

The U.S. Army Corps of Engineers, Fort Worth District, is preparing two Draft Environmental Assessments (EAs) for proposed construction activities of Joint Task Force Six (JTF-6) located at Yuma and Naco, Arizona.

The proposed project in Yuma, Yuma County, Arizona, would consist of installing border lights and camera poles for a distance of approximately 9 miles along the U.S.-Mexico border (Figure A). Military personnel involved with this project would be housed in Yuma for the duration of the construction period. The action is proposed to begin in late spring/early summer of 1999.

The proposed project near Naco, Cochise County, Arizona, would consist of installing lighting poles one mile east and one mile west of the pedestrian Port of Entry (Figure B). Military personnel for this proposed project would be housed in either Naco or Sierra Vista. This action is also proposed to begin late spring/early summer 1999.

Both projects are located in previously cleared or heavily grazed areas. We are contacting your office to solicit your assistance in determining if any federally listed threatened, endangered, or other species of concern near the proposed project site which could be impacted by the Proposed Action. A copy of the draft EA will be forwarded to your office upon completion. If you require any additional information at this time, please contact Ms. Linda Ashe of my staff at (817) 978-6382.

Sincerely,

A handwritten signature in black ink, appearing to read "Mah E J", with a long horizontal stroke extending to the right.

William Fickel, Jr.  
Chief, Environmental Division

REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
FORT WORTH DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 17300  
FORT WORTH, TEXAS 76102-0300

December 11, 1998

Environmental Division

SUBJECT: Proposed JTF-6 Activities in Yuma and Naco, Arizona

Arizona Game and Fish Department  
Arizona Natural Heritage Program  
2221 West Greenway Road  
Phoenix, Arizona 85023-4399

Dear Gentlemen:

The U.S. Army Corps of Engineers, Fort Worth District, is preparing two Draft Environmental Assessments (EA's) for proposed construction activities of Joint Task Force Six (JTF-6) located at Yuma and Naco, Arizona.

The proposed project in Yuma, Yuma County, Arizona, would consist of installing border lights and camera poles for a distance of approximately 9 miles along the U.S.-Mexico border (Figure A). Military personnel involved with this project would be housed in Yuma for the duration of the construction period. The action is proposed to begin in late spring/early summer of 1999.

The proposed project near Naco, Cochise County, Arizona, would consist of installing lighting poles one mile east and one mile west of the pedestrian Port of Entry (Figure B). Military personnel for this proposed project would be housed in either Naco or Sierra Vista. This action is also proposed to begin late spring/early summer 1999.

We are contacting your office to solicit your assistance in determining if any state listed threatened, endangered, or other species of concern near the proposed project site could be impacted by the Proposed Action. A copy of the draft EA will be forwarded to your office upon completion. If you require any additional information at this time, please contact Ms. Linda Ashe of my staff at (817) 978-6382.

Sincerely,

A handwritten signature in dark ink, appearing to read "W. Fickel, Jr.", written in a cursive style.

William Fickel, Jr.  
Chief, Environmental Division

REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
**FORT WORTH DISTRICT, CORPS OF ENGINEERS**  
P. O. BOX 17300  
FORT WORTH, TEXAS 76102-0300  
December 11, 1998

Environmental Division

SUBJECT: Proposed JTF-6 Activities in Yuma and Naco, Arizona

Mr. James McGinnis  
Arizona Department of Agriculture  
Plant Services Division  
1688 West Adams  
Phoenix, Arizona 85007

Dear Mr. McGinnis:

The U.S. Army Corps of Engineers, Fort Worth District, is preparing two Draft Environmental Assessments (EAs) for proposed construction activities of Joint Task Force Six (JTF-6) located at Yuma and Naco, Arizona.

The proposed project in Yuma, Yuma County, Arizona, would consist of installing border lights and camera poles for a distance of approximately 9 miles along the U.S.-Mexico border (Figure A). Military personnel involved with this project would be housed in Yuma for the duration of the construction period. The action is proposed to begin in late spring/early summer of 1999.

The proposed project near Naco, Cochise County, Arizona, would consist of installing lighting poles one mile east and one mile west of the pedestrian Port of Entry (Figure B). Military personnel for this proposed project would be housed in either Naco or Sierra Vista. This action is also proposed to begin late spring/early summer 1999.

Both projects are located in previously cleared or heavily grazed areas. We are contacting your office to solicit your assistance in determining if any special requirements or permits may be necessary under the Arizona Native Plant Law to complete the proposed action. If you require any additional information at this time, please contact Ms. Linda Ashe of my staff at (817) 978-6382.

Sincerely,

A handwritten signature in black ink, appearing to read "W. Fickel, Jr.", with a long horizontal stroke extending to the right.

William Fickel, Jr.  
Chief, Environmental Division

FROM

(TUE) 01. 12 '99 16:58/ST. 16:49/NO. 3561627665 P 2/2

SHELDON R. JONES  
Director



*FL-E*  
G. JOHN CARAVETTA  
Associate Director

# Arizona Department of Agriculture

1688 West Adams, Phoenix, Arizona 85007  
(602) 542-4373 FAX (602) 542-0999

PLANT SERVICES DIVISION

December 18, 1998

William Fickel, Jr.  
Chief, Environmental Division  
Department of the Army  
Ft. Worth District Corps of Engineers  
P.O. Box 17300  
Ft. Worth, TX 76102-0300

RE: Proposed JTF-6 Activities in Yuma & Naco, Arizona

Dear Mr. Fickel:

The Arizona Department of Agriculture has reviewed the referenced information dated December 11, 1998.

Based on the information provided, the project is not expected to have any significant adverse impact to protected plant species. The Department recommends that if any protected plants exist on site, they be avoided or transplanted, preferably on site.

We appreciate the opportunity to review the proposed action. If you need additional information, please contact me at 602/542-3292.

Sincerely,

A handwritten signature in cursive script that reads "James McGinnis" with a stylized flourish at the end.

James McGinnis  
Chief Enforcement Officer  
Resource Protection

JM:clw

REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
**FORT WORTH DISTRICT, CORPS OF ENGINEERS**  
P. O. BOX 17300  
FORT WORTH, TEXAS 76102-0300

January 6, 1999

Environmental Division

**SUBJECT: Proposed JTF-6 Activities near Yuma, Arizona and Imperial County, California**

Daniel Abeyta  
California State Historic Preservation Officer  
Office of Historic Preservation - ATTN: John C. Whatford  
1416 9<sup>TH</sup> Street, Room 1442-7  
Sacramento, CA 95814

Dear Mr. Abeyta:

The U.S. Army Corps of Engineers, Fort Worth District (COE), is acting on behalf of INS/U.S. Border Patrol and Joint Task Force-Six (JTF-6) in regard to the above mentioned project. The Fort Worth District is preparing a Draft Environmental Assessment for JTF-6 for this project located in Yuma, Arizona with a small portion located in Imperial County, California.

The proposed JTF-6 project in Yuma, consists of installing border lights/camera poles approximately 6 miles along the U.S.-Mexico border. Figure A indicates the location of this project. A Class I Overview was conducted previous to the field survey. Two previously recorded sites, AZ X:6:43 and AZ X:6:63, are located in close proximity to a portion of the project area. A Class III archaeological inventory was conducted on December 8, 1998 for the proposed project area. We have enclosed a copy of Technical Report No. 98-22 for this project survey.

There were noted, during the Class I Overview, 12 sites in California that are about a mile northwest of the California section of the project. They are separated from the project area by Pilot Knob. No new archaeological sites or isolated occurrences were identified during the course of the survey.

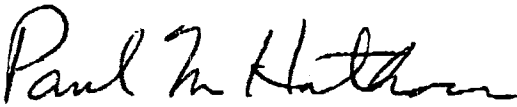
The COE has determined, in accordance with 36 CFR Part 800.4, .5 and .9(a), that the California portion of the proposed Yuma JTF-6 Border Surveillance project as planned will have no effect on National Register listed or eligible properties. If any cultural resources or human remains are encountered during construction, the COE will notify your office pursuant to 36 CFR 800.11.

-2-

We request that you review the enclosed information. If we do not hear from you within 15 days of receipt of this letter, we will assume your concurrence with our determination.

Should you require additional information or have any questions, please contact Ms. Patience Patterson at (817) 978-6390. Thank you for your assistance with this project.

Sincerely,

  
for William Fickel, Jr.  
Chief, Environmental Division

Enclosures

Copy Furnished w/o enclosures:

JTF-6  
ATTN: Milton Blankenship  
Bldg. 11603, Biggs AAF  
Ft. Bliss, TX 79918-0058



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
**FORT WORTH DISTRICT, CORPS OF ENGINEERS**  
**P. O. BOX 17300**  
**FORT WORTH, TEXAS 76102-0300**

January 8, 1999

Environmental Division

SUBJECT: Proposed JTF-6 Activities near Yuma, Arizona.

Mr. James Garrison, State Historic Preservation Officer  
Arizona State Parks  
1300 West Washington  
Phoenix, Arizona 85007

Dear Mr. Garrison:

The U.S. Army Corps of Engineers, Fort Worth District (COE), is acting on behalf of INS/U.S. Border Patrol and Joint Task Force-Six (JTF-6) in regard to the above mentioned project. The Fort Worth District is preparing a Draft Environmental Assessment for JTF-6 for this project located in Yuma, Arizona.

The proposed JTF-6 project in Yuma, consists of installing border lights/camera poles approximately 6 miles along the U.S.-Mexico border. Figure A indicates the location of this project. A Class I Overview was conducted previous to the field survey. Two previously recorded sites, AZ X:6:43 and AZ X:6:63, are located in close proximity to the project area. A Class III archaeological inventory was conducted on December 8, 1998 for the proposed project area. We have enclosed a copy of Technical Report No. 98-22 for this project survey. No new archaeological sites or isolated occurrences were identified during the course of the survey. JTF-6 will avoid the two previously recorded sites mentioned above.

The COE has determined, in accordance with 36 CFR Part 800.5 and 9 (a), that the proposed Yuma JTF-6 Border Surveillance project as planned will have no effect on National Register listed or eligible properties. If any cultural resources or human remains are encountered during construction, the COE will notify your office pursuant to 36 CFR 800.11.

We request that you review the enclosed information. If we do not hear from you within 15 days of receipt of this letter, we will assume your concurrence with our determination.

-2-

Should you require additional information or have any questions, please contact Ms. Patience Patterson at (817) 978-6390. Thank you for your assistance with this project.

Sincerely,



William Fickel, Jr.  
Chief, Environmental Division

Enclosures

Copy Furnished w/o enclosures:

JTF-6

ATTN: Milton Blankenship

Bldg. 11603, Biggs AAF

Ft. Bliss, TX 79918-0058

STATE OF CALIFORNIA - THE RESOURCES AGENCY

GRAY DAVIS, Governor

**OFFICE OF HISTORIC PRESERVATION  
DEPARTMENT OF PARKS AND RECREATION**

P.O. BOX 942866  
SACRAMENTO, CA 94286-0001  
(916) 653-8824 Fax: (916) 653-8824  
calshpo@mail2.quiknet.com



February 1, 1999

REPLY TO: COE980112A

Mr. William Fickel, Jr. Chief, Environmental Division  
Department of the Army  
Fort Worth District  
U.S. Army Corps of Engineers  
PO Box 17300  
Fort Worth, TX 76102-0300

**Project: Installation of Border Lights and Cameras along the U.S./Mexico  
Border near Yuma, Arizona and Imperial County, California**

Dear Mr. Fickel:

Thank you for requesting my views on the cited undertaking. Based on staff review of the documentation you submitted, I would like to offer the following comments on the actions you have taken to comply with Section 106 of the National Historic Preservation Act and the implementing regulations at 36 CFR Part 800.

The documentation indicates that reasonable measures were taken to identify historic properties within the portion of the area of potential effects (APE) of this proposed undertaking that lies within Imperial County, California. Your efforts to identify historic properties conform to applicable standards. No historic properties were identified within the APE of the undertaking.

Based on the foregoing finding I have no objection to your determination that this undertaking will not affect historic properties as it is currently designed. Your agency may have additional Section 106 responsibilities under certain circumstances set forth in 36 CFR 800.

Your consideration of historic properties in the project planning process is appreciated. If you have any questions regarding our review of this undertaking, please contact archaeologist Chuck Whatford of my staff at (916) 653-2716 or <calshpo.chuck@quiknet.com>

Sincerely,

Daniel Abeyta  
Acting State Historic Preservation Officer



"Managing and conserving natural, cultural, and recreational resources" *mill*

February 8, 1999

William Fickel, Jr.  
Chief, Environmental Division  
Fort Worth District, Corps of Engineers  
P.O. Box 17300  
Fort Worth, Texas 76102-0300

RE: Yuma County; Installation of Light and Camera Poles along Two Segments of the International Border South of Yuma, Arizona; DOD-Corps

Dear Mr. Fickel,

Thank you for providing this office with a copy of the survey report prepared in connection with the above-referenced undertaking. I have reviewed the documentation submitted and offer the following comments pursuant to 36 CFR Part 800:

No previously unidentified cultural resources were identified during the survey; however, two historic properties, the Yuma Valley Railroad and the Yuma West Main Canal, are located in the project area. Your cover letter indicates that impacts to both properties will be avoided.

The report indicates that the project area includes private land as well as lands administered by the Bureau of Reclamation (BOR) and the Bureau of Indian Affairs (BIA), Ft. Yuma Indian Reservation. Your letter does not state that either agency has reviewed the survey report or commented on this undertaking. Both should be included in our consultation. Neither your cover letter nor the report mentions consultation with Native American tribes and groups with a knowledge of or concern for historic properties in the area. Places of traditional cultural importance to Native Americans may not be recognized during archaeological surveys and may be affected by other than direct physical impacts. In addition to the Federally recognized tribes in the area, the Hia C'ed O'odham Alliance may be interested in the project area. If you have not already done so, we recommend that you consult with local tribes to insure that all potentially eligible properties have been identified and evaluated.

We appreciate your continued cooperation with this office in considering the impact of Federal undertakings on historic preservation. Please call me at (602) 542-7137 if you have questions or concerns.

Sincerely,

Carol Heathington  
Compliance Specialist  
State Historic Preservation Office

Jana Dee Hull  
Governor

STATE PARKS  
BOARD MEMBERS

Chairman  
Ruth D. Patterson  
St. Johns

Members  
Sheri J. Graham  
Sedona

Vernon Roubeshush  
Safford

Walter D. Armer, Jr.  
Benson

M. Jean Hassell  
Phoenix

Joseph H. Holmwood  
Mesa

J. Dennie Wells  
State Land  
Commissioner

Kenneth E. Travous  
Executive Director

Rafael Payan  
Assistant Director

1300 West Washington  
Phoenix, Arizona 85007

Tel & TTY 602-542-4174  
1-800-285-3703  
from (520) area code  
<http://www.pr.state.az.us>

General Fax:  
602-542-4180

Director's Office Fax:  
602-542-4188



DEPARTMENT OF THE ARMY  
FORT WORTH DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 17300  
FORT WORTH, TEXAS 76102-0300

REPLY TO  
ATTENTION OF

March 3, 1999

Environmental Division

Honorable Daniel Eddy, Jr., Chairperson  
Colorado River Indian Tribes  
Route 1, Box 23-B  
Parker, Arizona 85344

Dear Chairperson Eddy:

The U.S. Army Corps of Engineers, Fort Worth District (COE), is acting on behalf of the U.S. Border Patrol and Joint Task Force-Six (JTF-6) in regard to a JTF-6 project near Yuma. At the request of JTF-6 the Fort Worth District is preparing a Draft Environmental Assessment for this project located in Yuma, Arizona.

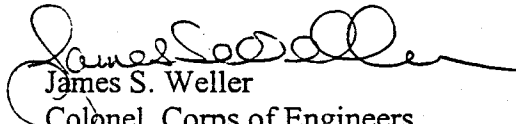
The proposed JTF-6 project in Yuma consists of installing border lights/camera poles approximately 6 miles along the U.S.-Mexico border. Figure A indicates the location of this project. A Class I Overview was conducted previous to the field survey. Two previously recorded sites, AZ X:6:43 and AZ X:6:63, are located in close proximity to the project area. A Class III archaeological inventory was conducted on December 8, 1998, for the proposed project area. We have enclosed a copy of Technical Report No. 98-23 for this project survey. No new archaeological sites or isolated occurrences were identified during the course of the survey. The two previously recorded sites mentioned above will be avoided during construction.

Even though an archaeological survey has been performed over the project areas, places of traditional cultural importance to Native Americans may not have been recognized during the survey. If there are any traditional cultural places within the project areas known to you that may be affected please let us know immediately. We wish to avoid any impacts to cultural resources and traditional cultural places.

The Fort Worth District has determined, in accordance with 36 CFR Part 800.5 and 800.9(a), that the proposed Yuma JTF-6 Border Lighting project as planned will have no effect on National Register listed or eligible properties. In accordance with federal laws and regulations in conducting these investigations, we wish to consult with the appropriate federally recognized Native American tribes who historically used this region or continue to use the area. Also, in accordance with 43 CFR Part 10.5, if any human remains are encountered during

construction, your office will be notified immediately. The cultural resources report is enclosed for your information. The draft Environmental Assessment will be out shortly. Your organization is on the mailing list to receive this document. We welcome your comments on this undertaking and look forward to hearing from you. Should you require additional information or have any questions, please contact Ms. Patience Patterson at (817) 978-6390. Thank you for your assistance with this project.

Sincerely,

  
James S. Weller  
Colonel, Corps of Engineers  
District Engineer

Enclosures

Copy Furnished w/o enclosures:

Mr. Milton Blankenship  
Joint Task Force-Six  
Building 11603, Biggs Army Air Field  
Fort Bliss, Texas 79918-0058



DEPARTMENT OF THE ARMY  
FORT WORTH DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 17300  
FORT WORTH, TEXAS 76102-0300

REPLY TO  
ATTENTION OF

March 8, 1999

Environmental Division

Honorable Edward D. Manuel, Chairman  
Tohono O'odham Nation  
P.O. Box 837  
Sells, Arizona 85634

Dear Chairman Manuel:

The U.S. Army Corps of Engineers, Fort Worth District (COE), is acting on behalf of the U.S. Border Patrol and Joint Task Force-Six (JTF-6) in regard to a JTF-6 project near Yuma. At the request of JTF-6 the Fort Worth District is preparing a Draft Environmental Assessment for this project located in Yuma, Arizona.

The proposed JTF-6 project in Yuma consists of installing border lights/camera poles approximately 6 miles along the U.S.-Mexico border. Figure A indicates the location of this project. A Class I Overview was conducted previous to the field survey. Two previously recorded sites, AZ X:6:43 and AZ X:6:63, are located in close proximity to the project area. A Class III archaeological inventory was conducted on December 8, 1998, for the proposed project area. We have enclosed a copy of Technical Report No. 98-23 for this project survey. No new archaeological sites or isolated occurrences were identified during the course of the survey. The two previously recorded sites mentioned above will be avoided during construction.

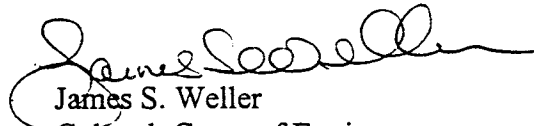
Even though an archaeological survey has been performed over the project areas, places of traditional cultural importance to Native Americans may not have been recognized during the survey. If there are any traditional cultural places within the project areas known to you that may be affected please let us know immediately. We wish to avoid any impacts to cultural resources and traditional cultural places.

The Fort Worth District has determined, in accordance with 36 CFR Part 800.5 and 800.9(a), that the proposed Yuma JTF-6 Border Lighting project as planned will have no effect on National Register listed or eligible properties. In accordance with federal laws and regulations in conducting these investigations, we wish to consult with the appropriate federally recognized Native American tribes who historically used this region or continue to use the area. Also, in accordance with 43 CFR Part 10.5, if any human remains are encountered during



construction, your office will be notified immediately. The cultural resources report is enclosed for your information. The draft Environmental Assessment will be out shortly. Your organization is on the mailing list to receive this document. We welcome your comments on this undertaking and look forward to hearing from you. Should you require additional information or have any questions, please contact Ms. Patience Patterson at (817) 978-6390. Thank you for your assistance with this project.

Sincerely,



James S. Weller  
Colonel, Corps of Engineers  
District Engineer

Enclosures

Copy Furnished w/o enclosures:

Mr. Milton Blankenship  
Joint Task Force--Six  
Building 11603, Biggs Army Air Field  
Fort Bliss, Texas 79918-0058

Copy Furnished w/ enclosures:

Mr. Peter Steere  
Cultural Resources Program  
Tohono O'odham Nation  
P.O. Box 837  
Sells, Arizona 85634



DEPARTMENT OF THE ARMY  
FORT WORTH DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 17300  
FORT WORTH, TEXAS 76102-0300

REPLY TO  
ATTENTION OF

March 8, 1999

Environmental Division

Ms Lorraine Eiler  
Hia C'ed O'odham Alliance  
4739 West Hayward  
Glendale, Arizona 85301

Dear Ms. Eiler:

The U.S. Army Corps of Engineers, Fort Worth District (COE), is acting on behalf of the U.S. Border Patrol and Joint Task Force-Six (JTF-6) in regard to a JTF-6 project near Yuma. At the request of JTF-6 the Fort Worth District is preparing a Draft Environmental Assessment for this project located in Yuma, Arizona.


The proposed JTF-6 project in Yuma consists of installing border lights/camera poles approximately 6 miles along the U.S.-Mexico border. Figure A indicates the location of this project. A Class I Overview was conducted previous to the field survey. Two previously recorded sites, AZ X:6:43 and AZ X:6:63, are located in close proximity to the project area. A Class III archaeological inventory was conducted on December 8, 1998, for the proposed project area. We have enclosed a copy of Technical Report No. 98-23 for this project survey. No new archaeological sites or isolated occurrences were identified during the course of the survey. The two previously recorded sites mentioned above will be avoided during construction.

Even though an archaeological survey has been performed over the project areas, places of traditional cultural importance to Native Americans may not have been recognized during the survey. If there are any traditional cultural places within the project areas known to you that may be affected please let us know immediately. We wish to avoid any impacts to cultural resources and traditional cultural places.

The Fort Worth District has determined, in accordance with 36 CFR Part 800.5 and 800.9(a), that the proposed Yuma JTF-6 Border Lighting project as planned will have no effect on National Register listed or eligible properties. In accordance with federal laws and regulations in conducting these investigations, we wish to consult with the appropriate federally recognized Native American tribes who historically used this region or continue to use the area. Also, in accordance with 43 CFR Part 10.5, if any human remains are encountered during

construction, the O'dham will be notified immediately. The cultural resources report is enclosed for your information. The draft Environmental Assessment will be out shortly. Your organization is on the mailing list to receive this document. We welcome your comments on this undertaking and look forward to hearing from you. Should you require additional information or have any questions, please contact Ms. Patience Patterson at (817) 978-6390. Thank you for your assistance with this project.

Sincerely,

  
James S. Weller  
Colonel, Corps of Engineers  
District Engineer

Enclosures

Copy Furnished w/o enclosures:

Mr. Milton Blankenship  
Joint Task Force-Six  
Building 11603, Biggs Army Air Field  
Fort Bliss, Texas 79918-0058



**DEPARTMENT OF THE ARMY**  
FORT WORTH DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 17300  
FORT WORTH, TEXAS 76102-0300

REPLY TO  
ATTENTION OF

March 12, 1999

Environmental Division

Mr. Samuel Rideshorse  
Superintendent, Fort Yuma Agency  
Bureau of Indian Affairs  
P.O. Box 11000  
Yuma, Arizona 85366-1000


Dear Mr. Rideshorse:

The U.S. Army Corps of Engineers, Fort Worth District (COE), is acting on behalf of the U.S. Border Patrol (USBP) and Joint Task Force-Six (JTF-6) in regard to the Proposed Lighting Project in Yuma County, Arizona and Imperial County, California. The proposed project involves the installation of approximately 154 lighting poles placed at either the 60-foot ROW or at a line 150 feet north of the international border in southern Yuma County, Arizona. Pursuant to Section 102 of the National Environmental Policy Act of 1969 (NEPA), and its implementing regulations, 40 CFR Parts 1500-1508, the Fort Worth District, at the request of JTF-6, has prepared a Draft Environmental Assessment (EA) for this project located in and around Yuma, Arizona.

The proposed draft Environmental Assessment tiers from the 1994 Programmatic Environmental Impact Statement (PEIS) prepared for the Immigration and Naturalization Service (INS) and JTF-6. The PEIS addresses the cumulative effects of past and reasonably foreseeable actions undertaken by JTF-6 that would facilitate numerous law enforcement agencies' missions to reduce illegal drug trafficking in four southwestern states (Texas, New Mexico, Arizona, and California). A copy of the draft EA is enclosed for your review and comment.

We welcome your comments on this document and look forward to hearing from you. Should you require additional information or have any questions, please contact Ms. Patience Patterson at (817) 978-6390. Thank you for your assistance with this project.

Sincerely,

  
William Fickel, Jr., Chief  
Environmental Division

Enclosure

Copy Furnished w/o enclosures:

Mr. Milton Blankenship  
Joint Task Force-Six  
Building 11603, Biggs Army Air Field  
Fort Bliss, Texas 79918-0058



**DEPARTMENT OF THE ARMY**  
FORT WORTH DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 17300  
FORT WORTH, TEXAS 76102-0300

REPLY TO  
ATTENTION OF

March 12, 1999

Environmental Division

Ms. Amy L. Heuslein  
Bureau of Indian Affairs  
Phoenix Area Office  
2 Arizona Center  
400 No. 5<sup>th</sup> St., 14<sup>th</sup> Floor  
Phoenix, Arizona 85004


Dear Ms. Heuslein:

The U.S. Army Corps of Engineers, Fort Worth District (COE), is acting on behalf of the U.S. Border Patrol (USBP) and Joint Task Force-Six (JTF-6) in regard to the Proposed Lighting Project in Yuma County, Arizona and Imperial County, California. The proposed project involves the installation of approximately 154 lighting poles placed at either the 60-foot ROW or at a line 150 feet north of the international border in southern Yuma County, Arizona. Pursuant to Section 102 of the National Environmental Policy Act of 1969 (NEPA), and its implementing regulations, 40 CFR Parts 1500-1508, the Fort Worth District, at the request of JTF-6, has prepared a Draft Environmental Assessment (EA) for this project located in and around Yuma, Arizona.

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We welcome your comments on this document and look forward to hearing from you. Should you require additional information or have any questions, please contact Ms. Patience Patterson at (817) 978-6390. Thank you for your assistance with this project.

Sincerely,

  
William Fickel, Jr., Chief  
Environmental Division

Enclosure

Copy Furnished w/o enclosures:

Mr. Milton Blankenship  
Joint Task Force-Six  
Building 11603, Biggs Army Air Field  
Fort Bliss, Texas 79918-0058





**DEPARTMENT OF THE ARMY**  
FORT WORTH DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 17300  
FORT WORTH, TEXAS 76102-0300

REPLY TO  
ATTENTION OF

March 12, 1999

Environmental Division

Ms. Carol Telles  
Bureau of Reclamation  
Yuma Area Office, YAO-2240  
P.O. Box "D"  
Yuma, Arizona 85366

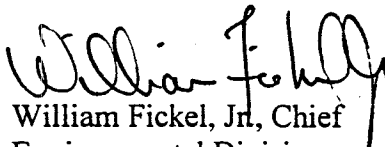
Dear Ms. Telles,

The U.S. Army Corps of Engineers, Fort Worth District (COE), is acting on behalf of the U.S. Border Patrol (USBP) and Joint Task Force-Six (JTF-6) in regard to the Proposed Lighting Project in Yuma County, Arizona and Imperial County, California. The proposed project involves the installation of approximately 154 lighting poles placed at either the 60-foot ROW or at a line 150 feet north of the international border in southern Yuma County, Arizona. Pursuant to Section 102 of the National Environmental Policy Act of 1969 (NEPA), and its implementing regulations, 40 CFR Parts 1500-1508, the Fort Worth District, at the request of JTF-6, has prepared a Draft Environmental Assessment (EA) for this project located in and around Yuma, Arizona.

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We welcome your comments on this document and look forward to hearing from you. Should you require additional information or have any questions, please contact Ms. Patience Patterson at (817) 978-6390. Thank you for your assistance with this project.

Sincerely,

  
William Fickel, Jr., Chief  
Environmental Division

Enclosure

Copy Furnished w/o enclosures:

Mr. Milton Blankenship  
Joint Task Force-Six  
Building 11603, Biggs Army Air Field  
Fort Bliss, Texas 79918-0058



**DEPARTMENT OF THE ARMY**  
FORT WORTH DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 17300  
FORT WORTH, TEXAS 76102-0300

REPLY TO  
ATTENTION OF

March 12, 1999

Environmental Division

Mr. James Garrison, State Historic Preservation Officer  
ATTN: Ms. Carol Heathington  
Arizona State Parks  
1300 West Washington  
Phoenix, Arizona 85007

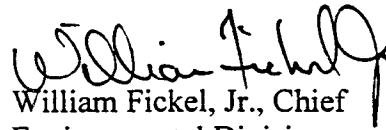
Dear Mr. Garrison:

The U.S. Army Corps of Engineers, Fort Worth District (COE), is acting on behalf of the U.S. Border Patrol (USBP) and Joint Task Force-Six (JTF-6) in regard to the Proposed Lighting Project in Yuma County, Arizona and Imperial County, California. The proposed project involves the installation of approximately 154 lighting poles placed at either the 60-foot ROW or at a line 150 feet north of the international border in southern Yuma County, Arizona. Pursuant to Section 102 of the National Environmental Policy Act of 1969 (NEPA), and its implementing regulations, 40 CFR Parts 1500-1508, the Fort Worth District, at the request of JTF-6, has prepared a Draft Environmental Assessment (EA) for this project located in and around Yuma, Arizona.

The proposed draft Environmental Assessment tiers from the 1994 Programmatic Environmental Impact Statement (PEIS) prepared for the Immigration and Naturalization Service (INS) and JTF-6. The PEIS addresses the cumulative effects of past and reasonably foreseeable actions undertaken by JTF-6 that would facilitate numerous law enforcement agencies' missions to reduce illegal drug trafficking in four southwestern states (Texas, New Mexico, Arizona, and California). A copy of the draft EA is enclosed for your review and comment.

We welcome your comments on this document and look forward to hearing from you. Should you require additional information or have any questions, please contact Ms. Patience Patterson at (817) 978-6390. Thank you for your assistance with this project.

Sincerely,

  
William Fickel, Jr., Chief  
Environmental Division

Enclosure

Copy Furnished w/o enclosures:

Mr. Milton Blankenship  
Joint Task Force-Six  
Building 11603, Biggs Army Air Field  
Fort Bliss, Texas 79918-0058



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
FORT WORTH DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 17300  
FORT WORTH, TEXAS 76102-0300

March 12, 1999

Environmental Division

Mr. Peter Steere, Manager  
Cultural Resources Program  
Tohono O'odham Nation  
P.O. Box 837  
Sells, Arizona 85634

Dear Mr. Steere:


The U.S. Army Corps of Engineers, Fort Worth District (COE), is acting on behalf of the U.S. Border Patrol (USBP) and Joint Task Force-Six (JTF-6) in regard to the Proposed Lighting Project in Yuma County, Arizona and Imperial County, California. The proposed project involves the installation of approximately 154 lighting poles placed at either the 60-foot ROW or at a line 150 feet north of the international border in southern Yuma County, Arizona. Pursuant to Section 102 of the National Environmental Policy Act of 1969 (NEPA), and its implementing regulations, 40 CFR Parts 1500-1508, the Fort Worth District, at the request of JTF-6, has prepared a Draft Environmental Assessment (EA) for this project located in and around Yuma, Arizona.

The proposed draft Environmental Assessment tiers from the 1994 Programmatic Environmental Impact Statement (PEIS) prepared for the Immigration and Naturalization Service (INS) and JTF-6. The PEIS addresses the cumulative effects of past and reasonably foreseeable actions undertaken by JTF-6 that would facilitate numerous law enforcement agencies' missions to reduce illegal drug trafficking in four southwestern states (Texas, New Mexico, Arizona, and California). A copy of the draft EA is enclosed for your review and comment.

Even though an archaeological survey has been performed over the project areas, places of traditional cultural importance to Native Americans may not have been recognized during the survey. If there are any traditional cultural places within the project areas known to you that may be affected please let us know immediately. We wish to avoid any impacts to cultural resources and traditional cultural places.

We welcome your comments on this document and look forward to hearing from you. Should you require additional information or have any questions, please contact Ms. Patience Patterson at (817) 978-6390. Thank you for your assistance with this project.

Sincerely,

  
William Fickel, Jr., Chief  
Environmental Division

Enclosure

Copy Furnished w/o enclosures:

Mr. Milton Blankenship  
Joint Task Force-Six  
Building 11603, Biggs Army Air Field  
Fort Bliss, Texas 79918-0058



**DEPARTMENT OF THE ARMY**  
FORT WORTH DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 17300  
FORT WORTH, TEXAS 76102-0300

REPLY TO  
ATTENTION OF

March 12, 1999

Environmental Division

Daniel Abeyta  
California State Historic Preservation Officer  
Office of Historic Preservation - ATTN: John C. Whatford  
1416 9<sup>TH</sup> Street, Room 1442-7  
Sacramento, CA 95814

Dear Mr. Abeyta:

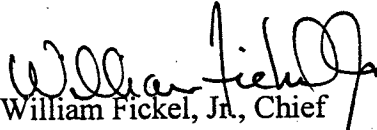
The U.S. Army Corps of Engineers, Fort Worth District (COE), is acting on behalf of the U.S. Border Patrol (USBP) and Joint Task Force-Six (JTF-6) in regard to the Proposed Lighting Project in Yuma County, Arizona and Imperial County, California. The proposed project involves the installation of approximately 154 lighting poles placed at either the 60-foot ROW or at a line 150 feet north of the international border in southern Yuma County, Arizona. Pursuant to Section 102 of the National Environmental Policy Act of 1969 (NEPA), and its implementing regulations, 40 CFR Parts 1500-1508, the Fort Worth District, at the request of JTF-6, has prepared a Draft Environmental Assessment (EA) for this project located in and around Yuma, Arizona.

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We welcome your comments on this document and look forward to hearing from you. Should you require additional information or have any questions, please contact Ms. Patience Patterson at (817) 978-6390. Thank you for your assistance with this project.

Sincerely,

  
William Fickel, Jr., Chief  
Environmental Division

Enclosure

Copy Furnished w/o enclosures:

Mr. Milton Blankenship  
Joint Task Force-Six  
Building 11603, Biggs Army Air Field  
Fort Bliss, Texas 79918-0058

March 15, 1999

Environmental Division

Honorable Mike Jackson, Sr., President  
Quechan Tribal Council  
P.O. Box 1899  
Yuma, Arizona 85366

Dear President Jackson:

The U.S. Army Corps of Engineers, Fort Worth District (COE), is acting on behalf of the U.S. Border Patrol (USBP) and Joint Task Force-Six (JTF-6) in regard to the Proposed Lighting Project in Yuma County, Arizona and Imperial County, California. The proposed project involves the installation of approximately 154 lighting poles placed either at the 60-foot ROW or at a line 150 feet north of the international border in southern Yuma County, Arizona. Pursuant to Section 102 of the National Environmental Policy Act of 1969 (NEPA), and its implementing regulations, 40 CFR Parts 1500-1508, the Fort Worth District, at the request of JTF-6, has prepared a Draft Environmental Assessment (EA) for this project located in and around Yuma, Arizona.

The proposed draft Environmental Assessment tiers from the 1994 Programmatic Environmental Impact Statement (PEIS) prepared for the Immigration and Naturalization Service (INS) and JTF-6. The PEIS addresses the cumulative effects of past and reasonably foreseeable actions undertaken by JTF-6 that would facilitate numerous law enforcement agencies' missions to reduce illegal drug trafficking in four southwestern states (Texas, New Mexico, Arizona, and California). A copy of the draft EA is enclosed for your review and comment.

Even though an archaeological survey has been performed over the project areas, places of traditional cultural importance to Native Americans may not have been recognized during the survey. If there are any traditional cultural places within the project areas known to you that may be affected, please let us know immediately. We wish to avoid any impacts to cultural resources and traditional cultural places.

-2-

We welcome your comments on this document and look forward to hearing from you. Should you require additional information or have any questions, please contact Ms. Patience Patterson at (817) 978-6390. Thank you for your assistance with this project.

Sincerely,

/s/

James S. Weller  
Colonel, Corps of Engineers  
District Engineer

Enclosure

Copy Furnished w/o enclosures:

Mr. Milton Blankenship  
Joint Task Force-Six  
Building 11603, Biggs Army Air Field  
Fort Bliss, Texas 79918-0058

March 15, 1999

Environmental Division

Honorable Sherry Cordova, Chairperson  
Cocopah Indian Tribe  
County 15<sup>th</sup> & Avenue G  
Somerton, Arizona 85350

Dear Chairperson Cordova:

The U.S. Army Corps of Engineers, Fort Worth District (COE), is acting on behalf of the U.S. Border Patrol (USBP) and Joint Task Force-Six (JTF-6) in regard to the Proposed Lighting Project in Yuma County, Arizona and Imperial County, California. The proposed project involves the installation of approximately 154 lighting poles placed either at the 60-foot ROW or at a line 150 feet north of the international border in southern Yuma County, Arizona. Pursuant to Section 102 of the National Environmental Policy Act of 1969 (NEPA), and its implementing regulations, 40 CFR Parts 1500-1508, the Fort Worth District, at the request of JTF-6, has prepared a Draft Environmental Assessment (EA) for this project located in and around Yuma, Arizona.

The proposed draft Environmental Assessment tiers from the 1994 Programmatic Environmental Impact Statement (PEIS) prepared for the Immigration and Naturalization Service (INS) and JTF-6. The PEIS addresses the cumulative effects of past and reasonably foreseeable actions undertaken by JTF-6 that would facilitate numerous law enforcement agencies' missions to reduce illegal drug trafficking in four southwestern states (Texas, New Mexico, Arizona, and California). A copy of the draft EA is enclosed for your review and comment.

Even though an archaeological survey has been performed over the project areas, places of traditional cultural importance to Native Americans may not have been recognized during the survey. If there are any traditional cultural places within the project areas known to you that may be affected, please let us know immediately. We wish to avoid any impacts to cultural resources and traditional cultural places.

-2-

We welcome your comments on this document and look forward to hearing from you. Should you require additional information or have any questions, please contact Ms. Patience Patterson at (817) 978-6390. Thank you for your assistance with this project.

Sincerely,

/s/

James S. Weller  
Colonel, Corps of Engineers  
District Engineer

Enclosures

Copy Furnished w/o enclosures:

Mr. Milton Blankenship  
Joint Task Force-Six  
Building 11603, Biggs Army Air Field  
Fort Bliss, Texas 79918-0058

**United States Department of the Interior****U.S. Fish and Wildlife Service**

2321 W. Royal Palm Road, Suite 103

Phoenix, Arizona 85021-4951

(602)640-2720 FAX (602)640-2730



In Reply Refer To:

AESO/SE

March 23, 1999

Ms. Linda Ashe  
U.S. Army Corps of Engineers  
Fort Worth District  
Attn: CESWF-PL-RE, Room 3A14  
819 Taylor Street  
Fort Worth, Texas 76102-0300

Dear Ms. Ashe:

The Fish and Wildlife Service has reviewed the draft Environmental Assessment (EA) for a Joint Task Force Six proposed action in Yuma County, Arizona and Imperial County, California. The proposed action consists of placing approximately 154 concrete light poles along portions of the border between the United States and Mexico near Yuma, Arizona. We have the following comments for your consideration.

**Threatened and Endangered Species**

Two portions of the proposed action are near potential, suitable and occupied habitat for the federally endangered southwestern willow flycatcher (*Empidonax traillii extimus*). These are the sections near Gadsden and west of the city of Yuma near Morelos Dam. Past surveys have documented flycatchers in the vicinity of Hunter's Hole in the Limitrophe Division. Flycatchers are migratory birds that winter in central America and breed in the southwestern United States. Breeding habitat consists of dense, multi-canopy layer riparian vegetation. Historically, willow and cottonwood-willow vegetation communities provided these habitats. In recent times the amounts of these native species has declined significantly. Tamarisk, an exotic tree, has replaced the native vegetation types along rivers and backwaters of the Colorado River. Photographs included in the EA showed stands of trees outside of the area of direct, physical disturbance, but within the area that could be affected by construction noise. If these adjacent areas contain suitable or occupied flycatcher habitat, noise from the construction activities during the breeding season could result in nest abandonment.

The Service suggests that riparian vegetation, including dense stands of tamarisk, in the vicinity of the proposed action segments mentioned here be evaluated for suitability for flycatchers. There has been some work done in the Yuma area by Bureau of Reclamation to assess the presence of flycatchers or suitable habitat. The Arizona Game and Fish Department may have information helpful to you in this evaluation. If suitable or occupied habitats are present, and construction activities can be avoided in these segments during the breeding season (May to August); construction outside of the breeding period should not cause effects. However, there is no analysis in the draft

EA on the possible effect of bright lights near breeding areas for this species. If the proposed action is near enough to the occupied habitats, this lighting may be a concern, and we recommend that it be addressed.

Additional section 7 consultation on this project may be necessary if modifications to construction periods to avoid noise impacts to flycatchers cannot be implemented, if there are other changes to the action that require additional analysis, or if potential effects are identified from the presence of bright lights near flycatcher nesting areas. The Service would be happy to work with you to resolve any issues that affect listed or proposed threatened or endangered species.

Thank you for the opportunity to comment on this project. If we may be of further assistance, please contact Lesley Fitzpatrick (602/640-2720 x236) or Tom Gatz (x240).

Sincerely,



David L. Harlow  
Field Supervisor

cc: Regional Supervisor, Arizona Game and Fish Department, Yuma, AZ

brightlights.wpd/laf

ny  
mbl  
EV-EC

**United States Department of the Interior  
BUREAU OF INDIAN AFFAIRS**



**Fort Yuma Agency  
P.O. Box 11000  
Yuma, Arizona 85366-1000**

March 29, 1999

**IN REPLY REFER TO:  
COM: (760) 572-0248  
FAX: (760) 572-0896**

**William Fickel, Jr., Chief  
Environmental Division  
Fort Worth District, U. S. Army Corps of Engineers  
P. O. Box 17300  
Fort Worth, Texas 76102 - 0300**

Dear Mr. Fickel:

Thank you for providing us with a copy of the Draft Environmental Assessment (EA) of the Joint Task Force Six Proposed Lighting Project in Yuma County, Arizona and Imperial County, California for review. We have some concerns about your approach to the preparation of the EA:

1. There was an apparent lack of consultation with the Cocopah Indian Tribe, the Quechan Indian Tribe and Fort Yuma Agency for either the proposed project or the EA.
2. By whose permission were the cultural resources class III survey and the biological site reconnaissance survey conducted on the Fort Yuma Indian Reservation at the Andrade Port of Entry?

Some specific comments follow:

1. The site in Imperial County is located at the Andrade Port of Entry on the Fort Yuma Indian Reservation (Quechan Tribe).
2. **AFFECTED ENVIRONMENT**

**LAND USE:** last line  
Access is provided by . . . or the *Bureau of Reclamation Yuma Valley Colorado River* levee.



W. Fickle, INS Lighting EA

2

## WATER RESOURCES

Surface Water: last line  
The *former* Alamo Canal . . .

## BIOLOGICAL RESOURCES

We believe it is better to break out descriptions by clearly identified sites, such as east of San Luis, along the Colorado River and the Andrade Port of Entry.

## AESTHETIC RESOURCES

Apparently only one unidentified site is described here. What about the others?

### 3. ENVIRONMENTAL DESIGN MEASURES

#### CULTURAL RESOURCES

For the Andrade site we believe the Quechan Tribe as well as the California State Historic Preservation Officer should be notified about any additional cultural resource sites located during pole installation.

### 4. PUBLIC INVOLVEMENT

How was consultation with the Cocopah Tribe, the Quechan Tribe and the Bureau of Indian Affairs carried out? Neither Tribe nor we have a record of it.

### 5. APPENDIX C: Threatened and Endangered Species Information

There are no letters from or about California for the Andrade site.

### 6. APPENDIX D: Consultation Letters

There were none from or to the Cocopah Tribe, the Quechan Tribe or the Bureau of Indian Affairs.

W. Fickle, INS Lighting EA

3

If you have questions or need more information, we suggest you contact the following:

**For Bureau of Indian Affairs Environmental Regulations and Requirements**

Amy Heuslein, Environmental Protection Officer  
Phoenix Area Office  
P. O. Box 10  
Phoenix, Arizona 85001  
Telephone: (602)379-6750

**For Bureau of Indian Affairs Archaeology and Cultural Resource Preservation**

- Garry Cantley, Archaeologist  
- same address and telephone number -

**For the Cocopah Tribe**

John Swenson, Environmental Protection Officer  
Cocopah Tribal Office  
County 15<sup>th</sup> Street and Avenue G  
Somerton, Arizona 85350  
Telephone: (520)627-3729

**For the Quechan Tribe**

Earl Hawes, Environmental Protection Officer  
Quechan Tribal Office  
P. O. Box 1899  
Yuma, Arizona 85366 - 1899  
Telephone: (760)572-2577

**For local coordination and liaison**

William Pyott, Land Operations Officer  
Fort Yuma Agency (address and telephone number as on letterhead)

W. Fickle, INS Lighting EA

4

For permits, leases and rights of way on Indian Trust Land

Laura Austin, Realty Officer  
Fort Yuma Agency

If we can be of further assistance, please call.

Sincerely,

A handwritten signature in black ink, appearing to read "James R. Fickle", is written over a horizontal dashed line.

Superintendent



INTERNATIONAL BOUNDARY AND WATER COMMISSION  
UNITED STATES AND MEXICO

OFFICE OF THE COMMISSIONER  
UNITED STATES SECTION

APR 2 1999

Ms. Linda Ashe  
U. S. Army Corps of Engineers  
Fort Worth District  
Attn: CESWF-PL-RE, Room 3A14  
819 Taylor Street  
Fort Worth, Texas 76102-0300

Re: Draft Environmental Assessment, Joint Task Force Six, Proposed Lighting Project, Yuma  
County, Arizona, Imperial County, California

Dear Ms. Ashe:

The U. S. Section of the International Boundary and Water Commission (USIBWC) has reviewed the referenced document. The USIBWC is providing the following comments, including the attached information.

Please assure that there would be no boundary monument, cross boundary drainage, and transboundary pollution impacts associated with implementation of the proposed alternative. Although the attached information requests that work be at least two feet away from the international boundary, the USIBWC recommends that construction activities be off-set at least five feet from the international boundary because of the size of the equipment that may be used and the maneuvering area that the equipment may need.

Specific comments follow: In section 1.0 Introduction, part 1.1 Project Background, second paragraph, item 1, the third sentence, revise the words on the irrigation canal to read "the Wellton-Mohawk Bypass Drain". In section 1.2 Proposed Action, fourth sentence, revise the words irrigation canal to read as stated above. In section 2.1 Proposed Action, under item 2, Route (A) and Route (B), revise the words irrigation levee to "Wellton-Mohawk Bypass road", and under item 2 Route (C), based on photograph A-9, the last sentence should be revised to read "east side of Wellton-Mohawk Bypass Drain maintenance road and on top of maintenance road." On page 12 in the third paragraph, second sentence, revise to "County Road 23 and the Wellton-Mohawk Bypass Drain maintenance road intersect." On page 12, items 3 and 4, based on photographs A-10 and A-11, the references to "east side of the levee" should be revised to read "placed between the east side of the Wellton-Mohawk Bypass Drain maintenance road and the west toe of the Yuma Valley levee." The labeling on photographs A-7 through A-11 need to be revised to read the "Wellton-Mohawk Bypass Drain", not irrigation canal. On page 43, add "U.S. Department of Interior, Bureau of Land Management".

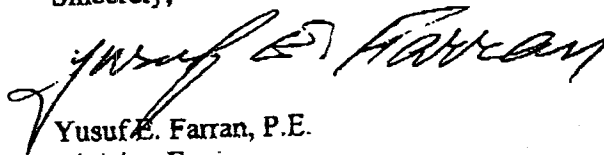
The USIBWC will notify the Mexican Section regarding the proposed activity in the vicinity of the international boundary. Please provide this office with three copies of the final EA for our review,

The Commons, Building C, Suite 310 - 4171 N. Mesa Street - El Paso, Texas 79902  
(915) 832-4100 - (FAX) (915) 832-4190

and provide one copy to Mr. Alton Goff at our Yuma Field Office, P.O. Box 5737, Yuma, Arizona 85364.

We thank you for the opportunity to review the documentation for the proposed action. If you have any questions, please contact me at (915) 832-4148, or have your staff contact Mr. Steve Fox at (915) 832-4736.

Sincerely,

A handwritten signature in black ink, appearing to read "Yusuf E. Farran". The signature is fluid and cursive, with the first name "Yusuf" being more prominent.

Yusuf E. Farran, P.E.  
Division Engineer  
Environmental Management Division

Attachment as stated

## United States Section, International Boundary and Water Commission (USIBWC) Information

The USIBWC by virtue of the Treaty of February 3, 1944 (1944 Water Treaty), "Utilization of Waters of the Colorado and Tijuana Rivers and the Rio Grande" (TS 994; 59 Stat. 1219), and agreements concluded thereunder by the United States and Mexico, is responsible for ensuring that the United States Government meets the obligations incurred in those agreements. The USIBWC's statutory authority for carrying out actions is also tasked by the 1944 Treaty to work with the Mexican Section of the International Boundary and Water Commission (MxIBWC) to maintain the International Boundary and Water Commission (IBWC) monuments (IBWC Minute No. 244) and markers (IBWC Minute No. 249). In this respect, we ask that any action you propose near the international boundary address the adverse impacts which may occur upon the visibility and permanent placement of the international boundary monuments and markers, the present drainage patterns to and from Mexico, and that all potential transboundary pollution problems be properly addressed to insure that none occur in either country.

In general terms, the construction of government or private facilities in the vicinity of the international boundary between the United States and Mexico have the potential of causing adverse impact on both countries. Facilities as referred to here would include, but would not be limited to paved parking lots, simple re-grading or modification of the natural terrain, buildings, drainage ditches, barriers or walls, roads and bridges, fences, utilities, and berms and dikes. Certainly some of these activities may be planned as a part of the proposed action. The construction of the proposed project has the potential of destabilizing, obstructing the view, or impeding maintenance access to the international monuments and markers along the boundary line between the United States and Mexico, altering drainage patterns, and/or causing transboundary pollution problems.

Regarding visibility and the permanent placement of international boundary monuments and markers, the United States and Mexico, through this and predecessor joint Commissions, placed and jointly maintain IBWC Monuments No. 178 through No. 204A in Yuma County, Arizona, and IBWC Monuments No. 206 through No. 230 in Imperial County, California. A list of IBWC Monument locations and distances from one monument to the next monument along the Yuma County and Imperial County border with Mexico is in Attachment A. The IBWC markers are placed intermediate to the monuments and their locations and distances are not included in the attached table.

Along certain areas of the international boundary, an area of public lands 18 meters (60 feet) wide was reserved by Presidential Proclamations in 1897 and 1907, and portions of the international boundary with Mexico common with Yuma County and Imperial County have been so designated. Please coordinate with Mr. Manuel Rubio, Jr., Chief, General Services Division, at this address (telephone (915) 832-4137), as a precautionary measure to prevent the displacement of any of the IBWC land boundary monuments and markers in the area of the proposed action and encroachment into the reserved public lands. Also, please coordinate your activities with the Bureau of Land Management, the federal agency responsible for public lands in the State of Arizona.

In some places, fences have been constructed near the boundary by private landowners or by government agencies other than the USIBWC, and these fences do not designate the international

boundary. Any fences and associated gates that may be required for the proposed action near the border must be constructed in a way as not to interfere with the line-of-sight or access by the IBWC to the international boundary. Fences must also be constructed in a way so as not to adversely affect drainage. In normal circumstances, we request that fences be offset from the international boundary line by at least 0.6 meter (2 feet); however, larger offset distances may be required at specific sites that must be addressed on a case by case basis. Further, we ask that no waste or roadway construction materials be permitted to be piled in the areas near the international boundary.

The IBWC also requires boundary demarcation at international ports of entry by requiring placement of permanent boundary demarcation plaques and demarcation on the pavement of these crossings. We require that you coordinate with the USIBWC to ensure that the boundary is marked in an approved manner at your expense and under the supervision of the IBWC.

We ask that specific questions regarding hydrological or hydraulic issues be addressed to Mr. James Robinson, Division Engineer, Design Division, at this address or call (915) 832-4152. We also ask that specific site drawings, cross-sections, or profiles for the proposed project be provided to Mr. Richard Peace, Division Engineer, Operations and Maintenance Division, at this address (telephone (915) 832-4158). Please ensure that jurisdictional drainage requirements are met, especially those dealing with peak flows, change in water quality, increased flow volumes and redirection of flows.

The USIBWC would seek an assurance that the work in question meet US laws and regulations regarding quality of discharges into waterways. We will request that all potential sanitation problems are properly addressed so that no pollution is caused in either the United States or Mexico by the proposed project. The proposed action could have cumulative impacts that will require provisions for proper sewage treatment in any existing or proposed development. Any potential transportation of hazardous materials over the proposed action area poses a threat to human safety and health and to surface and ground water quality. The USIBWC strongly recommends that a spill prevention plan be developed if handling of hazardous materials is part of the proposed project and requests that we be included in any agency notification list developed.

**WESTERN LAND BOUNDARY MONUMENTS  
COORDINATES AND DISTANCES**

TYPE: M=Masonry  
I=Iron  
G=Granite  
MA=Marble

ELEVATION:

\*= $\pm$ /-1.00M\*\*= $\pm$ /-0.50M\*\*\*= $\pm$ /-2.00M\*\*\*\*= $\pm$ /-0.10M\*\*\*\*\*= $\pm$ /-0.20M\*\*\*\*\*= $\pm$ /-0.30M\*\*\*\*\*= $\pm$ /-5.00M

-----ARIZONA--YUMA COUNTY-----

MON #	Latitude	Longitude	Distance Meters	Miles	Kilometers Btw. Mon.	Elev. Meters	Type
178	N 32 02 19.7990	W 113 19 58.5974	709937.68	441.13	4.70		I
179	N 32 03 12.6700	W 113 22 46.4000	714635.75	444.05	5.70		I
180	N 32 04 16.8133	W 113 26 10.3094	720336.79	447.59	7.71		I
181	N 32 05 43.3850	W 113 30 46.1427	728048.20	452.38	7.29		I
182	N 32 07 05.2193	W 113 35 07.4689	735344.11	456.91	7.91		I
183	N 32 08 33.7040	W 113 39 50.6987	743246.68	461.82	4.22		I
184	N 32 09 20.7354	W 113 42 21.5467	747459.18	464.44	4.49		I
185	N 32 10 10.7390	W 113 45 02.1435	751955.34	467.23	4.51		I
186	N 32 11 01.0701	W 113 47 44.0538	756460.41	470.03	4.01		I
187	N 32 11 45.6596	W 113 50 07.6713	760465.81	472.52	7.82		I
188	N 32 13 12.7592	W 113 54 48.7479	768288.99	477.38	6.28		I
189	N 32 14 22.263	W 113 58 3.642	774560.75	481.28	3.56		I
190	N 32 15 01.606	W 114 00 41.027	778112.03	483.49	3.25		I
191	N 32 15 37.638	W 114 02 37.875	781366.73	485.51	3.14		I
192	N 32 16 12.392	W 114 04 30.743	784506.06	487.46	5.38		I
193	N 32 17 11.871	W 114 07 44.106	789884.51	490.80	5.73		I

Attachment A



-----ARIZONA--YUMA COUNTY-----							
MON #	Latitude	Longitude Meters	Distance		Kilometers	Elev.	Type
			Miles	Btw. Mon. Meters			
-----							
194	N 32 18 15.089	W 114 11 09.969	795609.43	494.36	3.12		I
195	N 32 18 49.555	W 114 13 02.364	798735.14	496.30	5.94		I
196	N 32 19 54.955	W 114 16 35.972	804673.27	499.99	7.23		I
197	N 32 21 14.599	W 114 20 56.703	811907.77	504.48	7.77		I
198	N 32 32 39.945	W 114 25 36.810	819683.07	509.31	7.60		I
199	N 32 24 03.184	W 114 30 10.690	827278.50	514.03	7.56		I
200	N 32 25 25.756	W 114 34 43.073	834839.68	518.73	6.41		I
201	N 32 26 35.674	W 114 38 34.231	841242.65	522.71	4.73		I
202	N 32 27 27.248	W 114 41 25.033	845972.25	525.65	4.67		I
203	N 32 28 18.043	W 114 44 13.506	850635.23	528.55	4.18		I
204	N 32 29 03.590	W 114 46 44.799	854821.76	531.15	1.85		M
204A	N 32 29 19.82	W 114 47 50.11	856517.08	532.20			I

-----ARIZONA--YUMA COUNTY-----			
Geographic Location	Distance		Kilometers Between Locations
	Meters	Miles	
-----			
Limitrophe of the Colorado River			
-----			
Colorado River at the Southerly International Boundary	858152.08	533.22	1.64
Gaging Station Colorado River at the Southerly International Boundary	858572.08	533.48	0.42
Twency-one Mile wasteway and Hunter's Hole	862072.08	535.66	3.51
Gadsden, Arizona	868192.08	539.46	6.12

## -----ARIZONA--YUMA COUNTY-----

Geographic Location	Distance Meters	Miles	Kilometers Between Locations
Limitrophe of the Colorado River			
Gaging Station Colorado River at Eleven Mile Wasteway	889102.08	552.45	20.91
Eleven Mile Wasteway	889272.08	552.56	0.18
Colorado River at Morelos Gaging Station	893372.08	555.10	4.09
Main Outlet Drain Extension No. 3	893762.08	555.35	0.40
Gaging Station Colorado River Immediately Below Morelos Dam	894402.08	555.74	0.63
Morelos Dam and Canal Heading	894532.08	555.82	0.13
Gaging Station Immediately above Morelos Dam	894732.08	555.95	0.21
Cooper Wasteway	895602.08	556.49	0.87
Gaging Station Colorado River at the Northerly International Boundary	896332.08	556.94	0.72
			0.37

## -----CALIFORNIA--IMPERIAL COUNTY-----

MON #	Latitude	Longitude	Distance Meters	Miles	Kilometers Btw. Mon.	Elev. Meters	Type
206	N 32 43 06.495	W 114 43 19.346	896697.08	557.17	0.80		I
207	N 32 43 04.436	W 114 43 50.379	897507.75	557.67	3.35	47.59	M
208	N 32 42 55.920	W 114 45 58.895	900862.60	559.75	6.37	53.77	I
209	N 32 42 39.579	W 114 50 03.045	907243.05	563.71	7.07	54.99	I
210	N 32 42 39.588	W 114 50 03.035	914303.53	568.10	4.31	*****52.70	I
211	N 32 42 10.139	W 114 57 18.288	918615.65	570.78	4.25	45.23	I

## -----CALIFORNIA--IMPERIAL COUNTY-----

MON #	Latitude	Longitude	Distance Meters	Kilometers Miles Btw. Mon.	Elev. Meters	Type
212	N 32 41 59.058	W 115 00 00.794	922862.31	573.42	41.47	I
				4.73		
213	N 32 41 46.635	W 115 03 01.790	927592.28	576.36	39.10	I
				6.18		
214	N 32 41 30.264	W 115 06 58.483	933778.51	580.20	33.96	I
				5.39		
215	N 32 41 15.907	W 115 10 24.693	939168.54	582.55	28.38	I
				6.60		
216	N 32 40 58.205	W 115 14 36.996	945764.02	587.65	22.48	I
				6.47		
217	N 32 40 40.685	W 115 18 44.568	952236.53	591.67	15.77	I
				5.21		
218	N 32 40 26.578	W 115 22 04.207	957456.12	594.91	8.74	I
				4.70		
219	N 32 40 13.669	W 115 25 04.219	962163.22	597.83	5.99	I
				5.42		
220	N 32 39 58.717	W 115 28 31.546	967585.01	601.20	0.55	I
				1.88		
220A	N 32 39 53.411	W 115 29 43.787	969474.50	602.37		I
				0.89		
221	N 32 39 50.914	W 115 30 17.758	970363.03	602.92	-0.56	I
				7.08		
222	N 32 39 30.859	W 115 34 48.460	977444.11	607.32	-4.33	I
				5.18		
223	N 32 39 16.093	W 115 38 06.265	982618.91	610.54	-4.37	I
				6.55		
224	N 32 38 57.264	W 115 42 16.843	989175.04	614.61	83.54	I
				1.88		
225	N 32 38 51.947	W 115 43 28.6011	991052.67	615.78	114.63	I
				4.36		
226	N 32 38 39.235	W 115 46 15.072	995408.82	618.49	64.17	I
				4.28		
227	N 32 38 26.776	W 115 48 58.748	999692.13	621.15	100.09	I
				5.86		
228	N 32 38 09.617	W 115 52 42.814	1005556.41	624.79	136.47	I
				5.01		
229	N 32 37 54.888	W 115 55 54.100	1010563.41	627.90	528.58	I
				7.52		
230	N 32 37 32.611	W 116 00 41.274	1018081.53	632.57	674.43	I
				7.47		

THE STATE



OF ARIZONA

**GAME & FISH DEPARTMENT**

2221 West Greenway Road, Phoenix, Arizona 85023-4399 (602) 942-3000  
www.gf.state.az.us

Yuma Office, 9140 E County 10 1/2 Street, Yuma, AZ 85365-3596 (520) 342-0091

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Joe Carter, Safford

Director  
Duane L. Shroufe

Deputy Director  
Steve K. Ferrell

April 8, 1999

Ms. Linda Ashe  
U.S. Army Corps of Engineers  
Fort Worth District  
Attn: CESWF-PL-RE, Room 3A14  
819 Taylor Street  
Fort Worth, TX 76102-0300

Re: Draft Environmental Assessment (EA) for a Joint Task Force  
Six Proposed Lighting Project in Yuma County, Arizona and  
Imperial County, California

Dear Ms. Ashe:

The Arizona Game and Fish Department (Department) has reviewed the above-referenced draft EA and the following comments, related to the Arizona portion of the proposed project, are provided for your consideration. We recommend clarification of the description of pole placement along the western international boundary. In the Executive Summary (page i), Location of Proposed Action (page 2), and Fish and Wildlife (page 33) sections, pole placement is described as being adjacent to an irrigation canal. However photographs showing the proposed project areas presented in Appendix A (Figures A-10 and A-11) actually show the Main Outlet Drain Extension (MODE) canal which is located inside (west) of the levee and not the irrigation canal which is located outside (east) of the levee. In the Proposed Action section (page 12), pole placement is described as being on the east side of the levee and not associated with an irrigation canal. We recommend that the levee description for pole placement be used throughout the document and drop any reference to an irrigation canal because it appears that the MODE was misidentified as an irrigation canal.

We also recommend that the Yuma clapper rail and southwestern willow flycatcher be added to the Threatened and Endangered Species section (page 20) since these species have been

Ms. Linda Ashe  
April 8, 1999  
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documented in the vicinity of the proposed project and occur on the List of Threatened, Endangered, or Species of Concern presented in Table 3-1 (page 21).

The Department understands that the proposed action includes constructing light poles approximately 350 feet apart in the following locations in Arizona: 1) Extending from the Colorado River levee located west of San Luis to approximately two miles east of San Luis along the southern international boundary. 2) Extending from the Colorado River levee west of San Luis north to County Road 22 along the levee. 3) Extending from 19<sup>th</sup> Street north to 18<sup>th</sup> Street along the levee. 4) Extending from 9<sup>th</sup> Street north to 7<sup>th</sup> Street along the levee.

The Department provided a list of special status species documented as occurring in the vicinity of this proposed project in a letter dated January 11, 1999. A copy of that letter is included in Appendix C of the draft EA. The Department understands that the proposed placement of lights is in previously disturbed areas. We note that the proposed placement of lights along the southern international boundary is adjacent to the boundary fence and ends approximately 3 miles west of the flat-tailed horned lizard management area. We also note that the proposed placement of lights along the Colorado River levee does not involve any wetland or riparian vegetation. For those reasons, the Department does not anticipate any significant adverse impacts to the special status species listed in our letter dated January 11, 1999, or to other wildlife species, resulting from this project.

However, since Department records indicate that the flat-tailed horned lizard, southwestern willow flycatcher, and Yuma clapper rail occur in the vicinity of this proposed project, we recommend contacting the U.S. Fish and Wildlife Service at the address provided below, for additional information regarding the Endangered Species Act and how it applies to these species.

David Harlow  
Field Supervisor  
Arizona Ecological Services State Office  
U.S. Fish and Wildlife Service  
2321 West Royal Palm Road, Suite 103  
Phoenix, Arizona 85021-4951

Ms. Linda Ashe

April 8, 1999

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Thank you for the opportunity to review and comment on this draft EA. Please send me a copy of the final EA when it becomes available. If you have any questions, please contact me at 520-342-0091.

Sincerely,

*Russell K Engel*

Russell K. Engel  
Habitat Program Manager  
Region IV, Yuma

RKE:rke

cc: Larry Voyles, Regional Supervisor, Region IV  
John Kennedy, Proj. Eval. Prog. Supervisor, Habitat Branch  
David Harlow, U.S. Fish and Wildlife Service, Phoenix

AGFD# 03-08-99-02

"Managing and conserving natural, cultural, and recreational resources" <sup>mt</sup>  
 EV-EC

April 12, 1999

William Fickel, Jr.  
 Chief, Environmental Division  
 Fort Worth District, Corps of Engineers  
 P.O. Box 17300  
 Fort Worth, Texas 76102-0300

RE: Yuma County; Environmental Assessment, Proposed Installation of Light and  
 Camera Poles along Two Segments of the International Border South of Yuma,  
 Arizona; DOD-Corps



Dear Mr. Fickel,

Jane Dee Hull  
 Governor

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 from (520) area code  
<http://www.pr.state.az.us>

General Fax:  
 602-542-4180

Director's Office Fax:  
 602-542-4188

Thank you for providing this office with a copy of the Environmental Assessment (EA) prepared in connection with the above-referenced undertaking. I have reviewed it and offer the following comments:

The EA summarizes the results of a literature search and archaeological survey performed recently, and includes a copy of my letter to you, dated February 9, 1999, in which I recommended consultation with interested Native American tribes and groups. The EA includes a list of contacts including several tribes in the project vicinity. Whenever possible, requests for consultation about places of traditional cultural importance should be directed to tribal cultural or heritage preservation offices. Places identified through this process should be avoided whenever possible.

We appreciate your continued cooperation with this office in considering the impact of Federal undertakings on historic properties. Please call me at (602) 542-7137 if you have questions or concerns.

Sincerely,

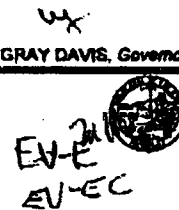
Carol Heathington  
 Compliance Specialist  
 State Historic Preservation Office

STATE OF CALIFORNIA - THE RESOURCES AGENCY

GRAY DAVIS, Governor

**OFFICE OF HISTORIC PRESERVATION  
DEPARTMENT OF PARKS AND RECREATION**

P.O. BOX 942866  
SACRAMENTO, CA 94296-0001  
(916) 853-8824 Fax: (916) 853-8824  
calshpo@mail2.quiknet.com



April 13, 1999

REPLY TO: COE980112A

Mr. William Fickel, Jr. Chief, Environmental Division  
Department of the Army  
Fort Worth District  
U.S. Army Corps of Engineers  
PO Box 17300  
Fort Worth, TX 76102-0300

**Project: JTF-6, Installation of Border Lights and Cameras along the  
U.S./Mexico Border near Yuma, Arizona and Imperial County,  
California**

Dear Mr. Fickel:

Thank you for sending me a copy of the proposed draft Environmental Assessment for the above-cited project and for requesting my comments on it.

You previously consulted with me concerning the proposed undertaking in a letter dated January 6, 1999. I concurred with your determinations in a response letter dated February 1, 1999. That letter, a copy of which is attached for your reference, concluded our consultation regarding the proposed undertaking in compliance with Section 106 of the National Historic Preservation Act and the implementing regulations at 36 CFR Part 800.

Your consideration of historic properties in the project planning process is appreciated. If you have any questions regarding this letter, please contact archaeologist Chuck Whatford of my staff at (916) 853-2716 or <calshpo.chuck@quiknet.com>

Sincerely,

Daniel Abeyta  
Acting State Historic Preservation Officer

Enclosure



April 22, 1999

Environmental Division

Mr. Samuel Rideshorse  
Superintendent, Fort Yuma Agency  
Bureau of Indian Affairs  
P.O. Box 11000  
Yuma, Arizona 85366-1000

Dear Mr. Rideshorse:

Thank you for your letter of March 29 with concerns regarding the Draft Environmental Assessment (EA) of the Joint Task Force Six Proposed Lighting Project in Yuma County, Arizona and Imperial County California.

In answer to your questions and concerns I offer the following information. Two sets of letters (one regarding the cultural resource survey report and later, one on the Draft EA) of consultation and requests for comments regarding this project were sent to the following agencies or persons and in most cases these letters were preceded by telephone calls:

Honorable Mike Jackson, Sr., President  
Quechan Tribal Council

Honorable Sherry Cordova, Chairperson  
Cocopah Indian Tribe

Ms. Carol Telles  
Bureau of Reclamation  
Yuma Area Office

Ms. Amy L. Heuslein  
Environmental Protection Officer  
Bureau of Indian Affairs

Mr. Peter Steere  
Cultural Resources Program  
Tohono O'odham Nation

Ms Lorraine Eiler  
Hia C'ed O'odham Alliance

Honorable Daniel Eddy, Jr.,  
Chairperson  
Colorado River Indian Tribes

Mr. Daniel Abeyta  
Acting California State Historic  
Preservation Officer

Mr. James Garrison, Arizona State  
Historic Preservation Officer

-2-

The class III cultural resources survey and the biological site reconnaissance survey conducted at the Andrade Port of Entry on the Fort Yuma Indian Reservation were contained within the public parking lot as illustrated in Figure A-12 and described on page 12 of the draft EA. No other areas on the reservation were entered at any time. The survey crew was accompanied by a U.S. Border Patrol Agent during the entire survey event. Those areas, which were surveyed, were those areas already in use by the U.S. Border Patrol and the public.

Your specific comments regarding the draft EA will be incorporated into the document. Consultation with the Cocopah and Quechan Tribes and the BIA was initiated with phone calls and letters (those letters mentioned above). Specific letters and the attached cultural resource survey report were sent in late February and early March. Then in mid-March specific letters with the attached draft EA were sent again both requesting questions and comments. The consultation letters were not included in the draft EA due to overlapping schedules and the lateness of the Andrade POE being added on as part of the project. To date, we have not received any comments on either document from the Quechan or the Cocopah Tribes. All letters received within the comment period will be included in the final EA.

Thank you for your list of contacts that you provided at the end of your letter. We will add these to the list of contacts that we presently have.

Should you require additional information or have any questions, please contact Ms. Patience Patterson at (817) 978-6390. Thank you for your assistance with this project.

Sincerely,

William Fickel, Jr., Chief  
Environmental Division

-3-

**Copies Furnished:**

**Mr. Milton Blankenship  
Joint Task Force-Six  
Building 11603, Biggs Army Air Field  
Fort Bliss, Texas 79918-0058**

**Ms. Amy L. Heuslein  
Environmental Protection Officer  
Bureau of Indian Affairs  
Phoenix Area Office  
2 Arizona Center  
400 No. 5<sup>th</sup> St., 14<sup>th</sup> Floor  
Phoenix, Arizona 85004**

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**APPENDIX E**

**Notice of Availability**

# Publisher's Affidavit of Publication

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STATE OF ARIZONA }  
COUNTY OF YUMA }

## PUBLIC NOTICE NOTICE OF AVAILABILITY

Interested parties are hereby notified that Joint Task Force Six has prepared an Environmental Assessment for the Proposed JTF-Six Mission near San Luis, Gadsden, and Yuma, Yuma County, Arizona; and near the Port of Entry at the Andrade Reservation in Imperial County, California. This notice is being issued to interested parties in accordance with the National Environmental Policy Act (NEPA), Public Law 91-190, and regulations for implementing the Procedural Provisions of the NEPA, 40 Code of Federal Regulations 1500-1508. The purpose of the Proposed Action is to install approximately 7.5 miles of lighting poles along the United States-Mexico international land border.

The EA is available for public inspection beginning March 8, 1999 and ending April 8, 1999. Comments will be accepted for the same 30-day period. The document is available for public viewing at the Yuma Public Library located at 350 S. Third Avenue, Yuma, Arizona. Library hours are 9:00 a.m. to 9:00 p.m., Tuesday through Thursday; and 9:00 a.m. to 5:00 p.m. on Friday and Saturday. The Library is closed on Sunday and Monday. All questions and comments regarding the Environmental Assessment should be directed, in writing, to the following:

U.S. Army Corps of Engineers  
Fort Worth District  
Attn: CESWF-PL-RE  
Room 3A14

819 Taylor Street  
Fort Worth, Texas 76102-0300  
For further information, contact the Fort Worth District, Corps of Engineers, Technical Manager at (817) 978-6382.  
Daily March 7, 8, 1999 #10428

Samuel J. Pepper or Lee Knapp, having been first duly sworn, deposes and says: that The Yuma Daily Sun is a newspaper of general circulation published daily in the City of Yuma, County of Yuma, State of Arizona; that he is the publisher or business manager of said paper; that the

## PUBLIC NOTICE

a printed copy of which, as it appeared in said paper, is hereto attached and made a part of this affidavit, was published in The Yuma Daily Sun For TWO issues; that the date of the first publication of said PUBLIC NOTICE

was MARCH 7, 1999 and the date of the last publication being MARCH 8, 1999 and that the dates when said

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was printed and published in said paper were

MARCH 7,8, 1999

Subscribed and sworn to before me, by the said Samuel J. Pepper or Lee Knapp

23rd day of March, 19 99

Virgen P. Perez Notary Public

My commission expires May 10, 2001

